

DOCUMENT RESUME

ED 296 128

CE 050 412

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TITLE Continuing the Education of Health Workers. A Workshop Manual.
INSTITUTION World Health Organization, Geneva (Switzerland).
REPORT NO ISBN-92-4-154220-9
PUB DATE 88
NOTE 196p.
AVAILABLE FROM WHO Publications Center USA, 49 Sheridan Avenue, Albany, NY 12210 (\$21.00).
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Allied Health Occupations Education; *Instructional Development; *Instructional Systems; *Policy Formation; Postsecondary Education; *Professional Continuing Education; Systems Approach; *Workshops

ABSTRACT

This book is intended to promote the development of systems of continuing education and describe some of the principles involved in establishing them, at either a national or regional level. The book is designed for workshop organizers, workshop participants, and persons interested in promoting continuing education systems. Resources are provided for a five-day workshop in which participants review the existing provision of continuing education in their countries or areas, identify ways in which this provision could be improved, prepare policy documents, outline programs, and agree on a specific plan of action that would lead to the development of an improved system of continuing education. Part 1 (over 50 percent of the book) provides detailed explanations of the steps entailed in developing a system of education. The individual chapters constituting part 1 deal with definitions, content, and methods; the concept of a system; needs assessment; steps in writing a policy statement; some activities of a system; programme design; organizational structures; implementation; and evaluation. Part 2 covers running a workshop; it includes 12 workshop exercises. Part 3 is a workshop leaders' guide. Appendixes to Part 1 deal with continuing education in Cuba, annual performance assessments, use of questionnaires, task and competence analysis, and preparation of policy statements. (MN)

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The World Health Organization is a specialized agency of the United Nations with primary responsibility for international health matters and public health. Through this organization, which was created in 1948, the health professions of some 165 countries exchange their knowledge and experience with the aim of making possible the attainment by all citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life.

By means of direct technical cooperation with its Member States, and by stimulating such cooperation among them, WHO promotes the development of comprehensive health services, the prevention and control of diseases, the improvement of environmental conditions, the development of health manpower, the coordination and development of biomedical and health services research, and the planning and implementation of health programmes.

These broad fields of endeavour encompass a wide variety of activities, such as developing systems of primary health care that reach the whole population of Member countries; promoting the health of mothers and children; combating malnutrition; controlling malaria and other communicable diseases, including tuberculosis and leprosy; having achieved the eradication of smallpox, promoting mass immunization against a number of other preventable diseases; improving mental health; providing safe water supplies; and training health personnel of all categories.

Progress towards better health throughout the world also demands international cooperation in such matters as establishing international standards for biological substances, pesticides, and pharmaceuticals; formulating environmental health criteria; recommending international nonproprietary names for drugs; administering the International Health Regulations; revising the International Classification of Diseases, Injuries, and Causes of Death; and collecting and disseminating health statistical information.

Further information on many aspects of WHO's work is presented in the Organization's publications.

CONTINUING THE EDUCATION OF HEALTH WORKERS

A WORKSHOP MANUAL

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WORLD HEALTH ORGANIZATION
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1988

ISBN 92 4 154220 9

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The authors alone are responsible for the views expressed in this publication.

TYPESET IN INDIA
PRINTED IN ENGLAND

87 7179—Macmillan Clays—8008

CONTENTS

Foreword	v
Preface	vii
Acknowledgements	x
Introduction	1
Part I Developing a system of continuing education	7
Chapter 1 Definition, content and methods	9
Chapter 2 A system	18
Chapter 3 Assessing needs	26
Chapter 4 How to write a policy statement	39
Chapter 5 Some activities of a system	48
Chapter 6 Programme design	55
Chapter 7 Organizational structures	63
Chapter 8 Implementation	72

Chapter 9	
Evaluation	80
Annex 1	
Continuing education in Cuba	89
Annex 2	
Establishment of the National Centre for Further Training in the Health Professions, Cuba	95
Annex 3	
Annual performance assessment	99
Annex 4	
Use of questionnaires	103
Annex 5	
An approach to task and competence analysis	111
Annex 6	
A check-list for preparing a policy statement	113
Part II Running a workshop	117
Timetable and commentary	119
Exercises	127
Part III Workshop leaders' guide	151

FOREWORD

The World Health Organization has for many years been concerned with methods of maintaining and improving the competence and performance of all categories of health worker. This concern was formalized in a resolution of the Twenty-seventh World Health Assembly in 1974, which called on Member States to consider as a matter of urgency:

1. The development of national systems of continuing education for the health professions, based on national and local health needs and demands, integrated with health care and educational systems, with full utilization of the resources of universities and schools of health personnel;
2. The promotion of the systems approach in educational planning for continuing education and the periodic assessment of the quality of performance of health personnel in delivering preventive and curative health care.

Continuing education becomes of paramount importance during periods of accelerated change, such as the one through which Member countries are now passing in their efforts to reorient their health systems to primary health care as the key means of achieving health for all under increasingly difficult socioeconomic conditions.

In a system of continuing education there is a network of inter-related elements embracing the people, policies, plans, functions, and facilities of several institutions and programmes, which have agreed to work together to provide an opportunity for all health workers to continue progressive learning throughout their careers. The system should facilitate community participation and ensure the coordination and deployment of resources from various sectors and programmes, the ultimate aim being to improve the competence of all categories of health worker.

Continuing education should respond primarily to the needs of the health system which, in turn, should respond to the needs of the people. It should also answer the needs of health workers striving to maintain and improve their professional competence.

The management of health services is made much more effective if all categories of health personnel undergo continuing education and if the supervision of health workers becomes part of the educational process. Appropriate continuing education should provide a bridge between basic training and practice; when integrated with supervision it helps to raise the standards of health care and leads to more efficient work patterns. Important as it is, however, continuing education does not have a life of its own and it is not an end in itself. It

requires sustained effort to make human work more relevant to the achievement of health programme goals.

This learning package is based on a set of guiding principles for the development of a system of continuing education for health workers that were originally issued in provisional form in 1982, and subsequently tested for their practical relevance to national needs and resources. It represents a further step in WHO's efforts to co-operate with Member countries in the development of systems to coordinate the activities of health services and educational and research institutions, professional associations, and other relevant entities. Coordination of this kind in turn facilitates inter-agency participation in establishing continuing education as part of national strategies for health development. Continuing education accessible to all categories of health staff calls for a comprehensive, intersectoral, and multidisciplinary approach.

As well as for those engaged in basic and post-basic training, this book is intended for decision-makers at all levels of the health care delivery system who are involved or interested in organizing continuing education for health workers. The methods it describes are flexible enough to be adapted to each country's political, socioeconomic, and health situation. I sincerely hope that Member States will find it suitable and useful.

T. Fülöp

Director,
Division of Health Manpower Development,
World Health Organization.

PREFACE

The overall purpose of this book is to promote the development of systems of continuing education and describe some of the principles involved in establishing them, at either a national or regional level. The development of systems of continuing education should not be seen as an end in itself: rather the aim is to improve the quality of health care provided by the whole range of health workers. Thus the development of appropriate systems of continuing education for health workers should be seen as one of the key strategies to be adopted to attain the goal of health for all by the year 2000.

Within this very broad context, one approach to stimulate the establishment of systems of continuing education is to conduct a workshop attended by policy-makers and people with influence in the health care system. This would increase awareness of the importance of continuing education and start the process of forming plans for a continuing education system.

This book provides resources for a five-day workshop. Participants in this workshop would review the existing provision of continuing education in their countries or areas, identify ways in which this provision could be improved, prepare policy documents, outline programmes, and agree on a specific plan of action that would lead to the development of an improved system of continuing education. Thus the workshop would be concerned not just with providing knowledge or skills but with providing a meeting place at which participants can reach practical decisions that can be implemented without delay.

How to use this book

This book is designed for three different groups of people, who will tend to use it in different ways.

The first group comprises the people who organize workshops on continuing education. Part II provides these workshop teams with a feasible timetable together with a detailed commentary on the way in which the sessions should be conducted, the key points that should be covered, and the difficulties and problems that may arise. This general commentary is supported by specific exercises that can be used during the workshop. Part III gives more detailed practical information on planning, conducting and following up a workshop.

The guidance given is sufficiently detailed to enable the workshop team to run a successful workshop, but it is not intended to impose a rigid programme or to imply that the methods it describes are the only ones suitable. On the contrary, the workshop team should adapt the contents of this book to the local situation.

It is also recognized that the principal quality required of a workshop team is the ability to stimulate learning and group problem-solving rather than to inculcate a high degree of expertise in the development of systems of continuing education. The latter may be acquired by studying Part I of the book.

The second group of readers is that comprising the participants in the workshop. It is anticipated that Parts I and II of this book will be used during the workshop as a guide to the various discussions and activities and as a source of general principles on the continuing education of health workers. Ideally, it should also inspire participants to record their own ideas, conclusions, and decisions on how a system of continuing education can be implemented in their own specific situations. In other words, participants can transform the general ideas printed in this book into specific proposals for action.

The third group that might use this book is made up of individual readers who are interested in promoting continuing education systems. It is suggested that these people first read the Introduction and then work through the workshop timetable and exercises in Part II, actually doing each of the exercises and consulting the appropriate chapters in Part I. Used in this way rather than being read from cover to cover, the book may stimulate the thinking of individual readers, leading them to develop solutions that are more appropriate to the local situation than could ever be provided in a conventional textbook.

A final point, which applies to all the people who might use this book, is that only a selection of reference materials has been provided so that some issues are not covered in great depth. In particular, the educational sciences related to continuing education are not really considered, so readers interested in planning educational activities within a system of continuing education may find relevant information in the following books.

- Abbatt, F. R. *Teaching for better learning—a guide for teachers of primary health care staff*. Geneva, World Health Organization, 1980.
- Guilbert, J.-J. *Educational handbook for health personnel*, 6th ed., Geneva, World Health Organization, 1987 (WHO Offset Publication No. 35).
- Hall, T. L. & Mejia, A. *Health manpower planning: principles, methods, issues*. Geneva, World Health Organization, 1978.
- Hornby, P. et al. *Guidelines for health manpower planning*. Geneva, World Health Organization, 1980.
- Katz, F. M. & Fülöp, T., ed. *Personnel for health care: case studies of education programmes*, Vol. 1. Geneva, World Health Organization, 1978 (Public Health Papers, No. 70).
- Katz, F. M. & Fülöp, T., ed. *Personnel for health care: case studies of education programmes*, Vol. 2. Geneva, World Health Organization, 1980 (Public Health Paper No. 71).
- Readers who are more interested in the management of the system and its relationship to health manpower development in general will find the following books useful.
- Global strategy for health for all by the year 2000*. Geneva, World Health Organization, 1981 ("Health for All" Series, No. 3).

Development of indicators for monitoring progress towards health for all by the year 2000. Geneva, World Health Organization, 1981 ("Health for All" Series, No. 4).

Managerial process for national health development: guiding principles for use in support of strategies for health for all by the year 2000. Geneva, World Health Organization, 1981 ("Health for All" Series, No. 5).

Health programme evaluation: guiding principles for its application in the managerial process for national health development. Geneva, World Health Organization, 1981 ("Health for All" Series, No. 6).

ACKNOWLEDGEMENTS

This material has been prepared in the Division of Health Manpower Development, World Health Organization, using material from a variety of sources both within and outside the organization.

The authors express their sincere thanks to the many people who have made valuable suggestions and contributions to the preparation of this book, in particular, Professor Charles E. Engel, Faculty of Medicine, University of New South Wales, Australia, and Professor George Miller, Clinton, NY, USA, who reviewed the overall strategy and suggested improvements.

INTRODUCTION

Continuing education and the need for a system

There is increasing recognition of the need for health workers to continue their education throughout their careers. Not only do health workers themselves wish to improve their own skills and competence but the introduction of new techniques and equipment and the changes taking place in health needs and health care policies necessitate continued training. The phrase "health care" is intended to mean not just curative treatment for the sick but the whole range of provision for promoting health and preventing disease.

In virtually every situation some response to this need has been made, so continuing education does take place—even though it may in many instances be ineffective or insufficient. Continuing education may be initiated by the health workers themselves, by their supervisors, by the managers of the health system, or by other agencies such as professional associations, publishers, and drug companies. The form of the continuing education may be written materials (journals, books, advertisements), meetings, courses, supervisory visits, or a variety of other methods.

With this diversity of approach it is not surprising that the effectiveness of the continuing education should be variable. So it is natural that in many countries there is concern that more continuing education should be provided and that it should be more effective.

The approach suggested in this book for achieving this aim is to develop a "system" of continuing education. This term needs some explanation as it is capable of being interpreted in many ways. A system is not the same thing as an organization that provides continuing education. It is much more than that. It is the sum of the educational activities, the organizational structure that supports and manages those activities, and, crucially, the relationship between the educational activities, the management, and the external agencies involved in the provision of health care (e.g., the Ministry of Health). The system should comprise a nationwide coordinated programme in which technology and resources are optimally used.

It is impossible to describe a system that is appropriate for every situation, though it is possible to define some criteria for judging a system. Since there is no ideal model to adopt, each country and each region within a country should design its own system by taking into account the way in which health care is organized, the local cultural and economic situation, the demand for continuing education, and the constraints and resources available. The notes on workshop organization given in Part II do *not* specify what kind

of system is needed. Rather such workshops are designed to help the participants think through their own needs and opportunities and so develop a system that will be appropriate to their situation. These issues are discussed in Chapters 1 and 2.

Stages in the development of a system

Health workers often have an opportunity to continue their education, but this educational provision is fragmented and uncoordinated and needs to be developed into a more effective system.

Probably the most common first stage in the development of a system of continuing education is the recognition that the existing opportunities for continuing education are inadequate. In other words, the first stage is the identification of a problem, and this is dealt with in Chapters 1-3.

The problem may be recognized either by the health workers themselves (individually or through some form of association or union) or by the managers of the health care system. In principle, the problem might be recognized by the community, though in practice this is unusual.

Following the recognition of the problem, the next stage is a commitment or a decision to try to solve the problem. It is at this stage, that the workshop described in this manual becomes useful. Unless there is some prior awareness that the current provision of continuing education is unsatisfactory, there is little point in meeting to discuss how that provision could be improved. It is not perhaps necessary for every participant at the workshop to be aware that the problem exists, but it would be premature to organize a workshop unless a good proportion of the participants feel that some improvement in continuing education is important.

The workshop can therefore be useful in identifying individuals who are already committed in principle to the idea of providing continuing education for health workers. It can also help in persuading other individuals, especially those in positions of power, that continuing education is a crucial way of improving the quality and relevance of health care and thus a powerful management tool for the implementation of strategies to achieve health for all by the year 2000.

The next stage is planning or programming and is described in Chapters 4-6. The workshop provides a setting where this stage can be started. The extent to which planning can be completed will vary from one workshop to another and depend on the people who attend, but it is to be hoped that in every workshop some provisional plans will be prepared for implementing a system of continuing education.

The final stages, implementing the plan and evaluating the system of continuing education, are covered in Chapters 7-9. These stages can, of course, occur only after the completion of the workshop.

The role of a workshop in developing a system

The development stages outlined in the previous section do not apply in every situation, but are sufficiently common to be worth considering. The essential point is that a need must be recognized. What often happens is that a few individuals recognize this need but do not have sufficient influence to bring about the necessary changes. This is one common situation in which a workshop can be of value. If the participants include a number of people who recognize the need for a continuing education system and a number of decision-makers who do not yet recognize the need, the workshop can bring about a shared awareness.

A workshop can also serve as a forum for identifying specific solutions to the problems that have been identified. By bringing together people with different responsibilities and backgrounds, various approaches can be considered in an informal, yet structured, situation. The approaches can be discussed, modified or adapted until some measure of agreement is reached on a feasible and appropriate approach within the specific situation of the country or area where the workshop is held. Thus the workshop can serve as the starting-point for actions that will lead to the development of a national or area-wide system of continuing education.

A workshop is unlikely to be the setting for actual decision-making, and it cannot implement the system. But it can serve as a forum for the sharing of ideas among the key decision-makers, it can help to bring about a consensus on the need for systems of continuing education, and it can promote agreement among the participants about the activities that should follow the workshop in order to implement an effective system. Indeed, unless the workshop does lead to specific actions in the development of a system of continuing education, it will have failed.

The general nature of a workshop

The word 'workshop' is used very widely to mean an educational event lasting for a period of between half a day and two or three weeks. Usually the word implies a certain style of education that minimizes formal lecturing and presentations of information while emphasizing active learning by the participants, but other characteristics are also important in workshops on continuing education systems.

The most important is that the aim is not to teach participants new facts or skills. Nor is it to persuade them to accept proposals or solutions presented by the workshop team. The intention is very firmly to provide a setting in which the participants themselves will reach decisions, make plans, and initiate change. It is vital that the decisions and plans should be those that the participants formulate themselves.

Since so much stress is laid on the participants' identifying solutions to their own problems, one might argue that there is no need for a workshop and that it would be better to allow the decision-making and problem-solving to take place through the ordinary routine processes. However, this is not so, because the workshop does have four clear benefits.

1. The attention of the whole group of participants is focused on the issue of continuing education for an extended period of time. Thus the experience and expertise of a number of people from differing backgrounds will be available in one place over a period of several days. This would be unlikely to happen under any other circumstances.
2. The activities of the workshop are structured to guide the problem-solving process. This is done by asking particular questions or by setting certain tasks. It is also done by suggesting techniques for problem-solving such as brainstorming and syndicate groups, with which some of the participants might otherwise not be familiar.
3. Resource materials will be available for participants to consult during and after the workshop.
4. The workshop is designed to lead to action through the preparation of a 'Plan of Action' during the final day and through the type of evaluation suggested.

These benefits do not, of course, guarantee that either appropriate decisions will be made or that any decisions will be implemented. However, the design of the workshop is intended to maximize the probability of both these outcomes.

Objectives of a workshop

The overall purpose of this book—and by implication of a workshop based on it—is to support the development and implementation of a national or local system of continuing education. This is done by providing a setting where the participants of the workshop can reach decisions and formulate plans that will be implemented later.

To support this broad purpose, the objectives of the workshop are to enable the participants to:

1. Describe the provisions made for continuing education (including supervision) in their countries or areas and make comments concerning its quality in comparison to the criteria outlined in Chapter 2.
2. Identify the kind of continuing education required in their own countries or areas in terms of the people who need continuing education and the skills they need to learn.

3. Prepare a document describing the policy for continuing education in their countries or areas.
4. Prepare a programme for a continuing education project.
5. Prepare a plan for the evaluation of the continuing education system as a whole.
6. Prepare a plan of action for maintaining progress towards the establishment of a system of continuing education.

This list of objectives should not be regarded as comprehensive. It gives only the key objectives that will enable the group to initiate work in continuing education.

Part I
DEVELOPING A SYSTEM OF
CONTINUING EDUCATION

DEFINITION, CONTENT AND METHODS

The aims of this chapter are to define continuing education, to explain its purposes, to outline the educational and health system framework within which continuing education programmes are planned, and to describe some of the educational methods used, and the educational and logistic limitations experienced.

Definition

For the purpose of this book, the continuing education of health workers is defined as all the experiences, after initial training, that help health care personnel to maintain or learn competences relevant to the provision of health care.

Continuing education thus includes all learning experiences, not just refresher courses, and lasts from the completion of initial training until retirement. It is concerned with a wide range of competences, not just knowledge, that are directly relevant to the provision of health care.

If it conforms with this definition, continuing education will reflect the health needs of the community and will lead to improvements in the quality of health care and ultimately to improvements in the health status of the community.

Purpose

Continuing education is a vital component in the management of the health system. It is important because it is the main way in which the quality of work done by health workers is maintained or improved. It is also the most important way of adapting the performance of health workers to meet the needs of the current situation or of some newly developing situation. In particular, it can help health workers to:

1. Maintain their standards of work and make good use of the available resources—an important point, as they may forget some aspects of their initial training or lose their initial motivation.

2. Adapt their work performance to the resources available (i.e., learn to use new equipment or to cope with a sudden limitation of resources).
3. Adapt their work performance to changes in health care policy.
4. Adapt their work performance to changes in the health status of the country.
5. Accept new responsibilities on promotion.
6. Learn how to overcome weaknesses in initial training, which may, for instance, have been deficient in imparting problem-solving skills and may even have been partly irrelevant.
7. Use resources more economically, thus helping to reduce the costs of health care.

The escalating cost of health care is one of today's vital issues. Increased coverage, greater use of expensive technology, and raised public expectations have all made greater demands on the health budget. Yet the costs of various health interventions are rarely considered in initial training. There is thus considerable scope for continuing education to make health workers more cost-conscious and thereby reduce the pressure on health service budgets. Indeed, the costs of continuing education might be directly recouped by the savings achieved.

Health workers themselves are likely to appreciate continuing education when it helps them to solve the problems they face in their work, when it equips them with the competences necessary for promotion, and when it satisfies their own aspirations to learn more about their professional fields.

Continuing education is certain to be welcomed by professional associations as the principal way of helping their members to achieve the highest possible levels of competence and motivation.

Framework

How continuing education relates to initial training

The training of health workers should be seen as a continuum stretching from earliest primary education to retirement. The pre-training phase of primary and secondary education develops skills of language, communication, numeracy, and logical thinking.

Initial professional or vocational training builds on the skills already learnt and prepares the health worker in the competences necessary for practice; it usually ends in the award of a qualification to successful students.

From this point the practising health worker can continue to learn in three ways: through postgraduate training leading to greater specialization; through experience gained in the practice of health care; and through continuing education. The boundaries

between these different kinds of learning are not clear and should not be clear because they all overlap.

How continuing education relates to health system management

Health system management has the responsibility of ensuring that maximum benefit is derived from the available resources for health. Among the most important—and most expensive—resources is health manpower. Thus health system management has a management planning function that aims to provide the right number of each type of personnel and to ensure that all of them have the appropriate competences.

This provision of health manpower is achieved through appropriate initial training, which may need to be supplemented by continuing education when the initial training is inadequate or when circumstances change.

The management of health manpower involves recruiting capable people, allocating them to their tasks, maintaining their motivation, and ensuring their competence. To this end the performance of health workers must be monitored using the techniques of work study explained in Chapter 3. Where necessary the performance is improved by further training. Thus continuing education lies at the heart of the responsibilities of health system managers and can in turn be seen as a component of the health manpower system.

Methods

Continuing education embodies the whole range of learning experiences that lead to improved performance in the delivery of health care. The application of a diversity of teaching methods not only makes learning more interesting but is more responsive to the needs of different health workers and to the different ways in which they learn. Various methods (not just refresher courses or seminars) are needed to meet different types of educational needs.

Learning in the context of continuing education has been shown to be more effective when the following criteria are fulfilled.

1. Learning must be perceived to be relevant to the interests of the health worker.
2. The health worker should be given opportunities to play an active role in the learning process by formulating questions and then seeking the answers, by discussing what has been found, and by applying what has been learnt to the field situation.
3. Health workers should therefore be confronted by a relevant problem, encouraged to tackle that problem, helped to identify what they must learn in order to solve the problem, and given

an opportunity to apply their new knowledge, understanding, and attitudes to the problem. This process is called problem-based learning.

The following brief review of learning situations and related learning aids should be evaluated with the above criteria in mind.

Courses

Courses comprise a sequence of learning events planned to help health workers to progress towards new or more advanced competences. Such events include lectures, presentations by participants, role playing, visits to laboratories, laboratory exercises, viewing and discussing films, and individual or group projects.

Meetings

Meetings are single learning events not necessarily linked to each other. Each meeting should have a single aim that can be achieved at that meeting. A meeting may consist of a lecture followed by a discussion; a discussion of a patient's problem or of a problem within the health service organization; an examination of the provision of services (audit); or a discussion of a film or of articles published in the literature.

Self assessment

A common technique used in much self-study material is the self-assessment approach. Health workers test their own skill and knowledge by attempting to solve problems and in this way identify what they need to learn. This, in turn, should provide an incentive to remedy the deficiency. The self-assessment approach can also be used in the context of meetings and courses.

Self study

Health workers learn through self study, as well as through contact with teachers and colleagues. The main sources of information are journals and books, the mass media (television, radio, and newspapers), specifically designed self-learning packages, and correspondence courses. This latter method has recently been given the name 'distance learning', an approach that does not require a face-to-face interaction between the tutor and the learner and may involve some form of tuition through printed materials posted to the learner or broadcast on radio or television. The learner may be asked to respond to this material in some way (for example, by doing exercises

or answering questions) and posting the work to a tutor. While this distance-learning technique may be most appropriate in the developed countries since it relies heavily on effective communication, it has also been successfully used in developing countries (including Colombia, Guyana, and Kenya). Indeed the need for distance learning may well be greatest where the population is widely scattered and it is difficult for health workers to travel to courses or meetings. Where telephone lines are available, it is possible to link isolated individuals or groups of health workers so that they can all listen to a presentation from a single centre. They will then be able to take part in a discussion in which they can speak and in which they can hear what is being said at all the other centres. This system is called 'telephone conferencing' and can be very valuable to overcome a sense of isolation.

The various methods of learning were listed by a consultative meeting on continuing education (arranged by the World Health Organization at Srinagar, India, from 29 June to 4 July 1983) and are reproduced here for convenience.

On-the-job methods

Health care audits
Job rotations
In-service training
On-site supervision and guidance
Journal article review club
Team assignments and projects
Review of patient records,
monthly reports
Meetings with colleagues
Telephone conferencing
Staff meetings and conferences

Off-the-job methods

Distance learning
Academic studies
Training courses
Self-study
Guided studies
Seminars and workshops
Conferences
Meetings of professional
organization
Meetings of scientific
societies

Supervision

Potentially one of the most powerful methods of continuing education, supervision is often carried out infrequently and punitively rather than regularly and supportively. Supervisory staff should be trained in the more positive and effective techniques of supervision. This approach has been adopted in a project in the United Republic of Tanzania, where supervisors are accompanied on visits to health centres and are shown which aspects of the health centre's work should be observed and how they can teach the staff in an unthreatening way. Training in supervision is also being given great emphasis in certain Latin American countries.

Limitations

Continuing education cannot by itself overcome all the problems in a health system. For example, the failure of an immunization pro-

gramme may have been due to wastage of vaccine. While continuing education could contribute by training staff how to store vaccine under appropriate conditions and how to persuade parents to bring children for their required second and third doses, it cannot overcome absolute shortages of vaccine, absence of transport facilities or lack of facilities for vaccine storage. Thus, continuing education should be seen as one of several essential components of an effective health system. It needs to be supplemented by other inputs that make a health system effective.

Learning problems

The learner's existing knowledge, ability, attitudes, learning style, and psychological state must be taken into account if learning is to be fully effective. It is difficult to generalize, but some common factors can be identified.

Each health worker is likely to have many interests, which compete for time. There may be social interests, family commitments, and the stringent demands of the job. A study of general practitioners in the United Kingdom showed that a substantial number rated 'maintenance of normal family life' as more important than 'continuing education'. In other situations, health workers will complain they are too busy caring for patients to take part in continuing education.

These and other problems are illustrated by a survey of health system managers conducted by the World Health Organization.¹ Managers at administrative centres did not feel that they needed any additional management training for their work. Managers at the local level felt that no training opportunities in health management existed for them—although they existed for those at other levels. Many managers felt that the opportunities for entering training programmes were not equally spread, and others felt that they did not have sufficient time to take part in management training programmes.

The right response to these problems might well be to accept the reality and avoid thinking that health workers should be more interested, should make time available, or should cut out other interests. Instead, continuing education should be made as interesting, enjoyable, and valuable as possible. If the subject matter to be imparted is based on the requirements for health care, time might be allowed for it during normal working hours. This would be the case if the education were given in the course of supervision.

Frequently there appears to be little reward for the health worker. Ideally, perhaps, health workers should be so highly motivated by their interest in the subject that other rewards would be superfluous. The same result could be obtained by presenting the

¹ Unpublished WHO document, EB67/1981/REC/1, Annex 5.

educational activities in a particularly interesting way. But these ideals are not always achieved, and in practice the intrinsic value of the educational activities can be supplemented by incorporating them into the career development system. This means taking account of successful participation in continuing education when promotions are considered or linking salary increases to achievement of a satisfactory standard of performance following continuing education. This issue is the subject of considerable debate in many countries, and it is raised simply for discussion.

Health workers often face a psychological threat to their self-esteem when faced with continuing education. They have been providing health care in a way they believe to be competent and are then told, in effect, that they are less competent than they thought. A common reaction is to reject this information and therefore the chance to improve. This response can occur in private (when reading a book for instance), but it can be much more acute when lack of competence is identified by another person.

A related problem is the need to unlearn. In many situations the learner is expected not only to acquire new abilities, knowledge, or attitudes but also to modify or revise existing habits or methods of working.

Both these problems must be overcome if continuing education is to be effective. Teachers can try the following methods.

1. Make the learning environment as unthreatening as possible. This can be done in many ways. For example, in group activities the mood should be relaxed; the group leader should not be dogmatic but should encourage suggestions from the learners.
2. Where new techniques are to be suggested, make sure that there is strong evidence of their value.
3. Avoid blaming learners for any weaknesses they may have.
4. Involve the learners in making plans for their own continuing education.
5. Make continuing education relevant to priority problems recognized by the learner.
6. Put the learners in a situation where alternative health care techniques are tried—so that they may decide for themselves which technique is better.

The aim is to make it as easy as possible for the learner to accept the suggested change.

Health workers may not be aware of their need to learn. They may not realize that their own standards have been slowly deteriorating over the years or that changes have been taking place in the practice of health care. It is precisely this kind of health worker who has the greatest need for continuing education and is the least likely to seek it.

One approach would be to make continuing education compulsory, but a more effective method is to stimulate self-awareness and create a desire to learn. This is somewhat idealistic but can be at least partially achieved through the use of self-assessment exercises and audit. An example of audit commonly occurs in hospital clinical departments where the progress of patients is reviewed regularly to identify whether the quality of care could have been improved. Similar schemes could be adopted in health centres or in any situation in which health workers collaborate in teams.

Perhaps we should regard the learner as we do our patients. We include patients as members of the team, we encourage them to participate in their own management. We identify the cause of the problems, we plan how to help them progress towards solving their problems and how to avoid further problems. We monitor progress and adjust the management of problems accordingly or review the original diagnosis. We do not blame patients for lack of expected progress.

Teaching problems

Although continuing education is widely regarded as an important and desirable element of health care systems, there is surprisingly little quantified evidence that any benefit is derived from it. Bertram & Brooks-Bertram¹ reported that 'a significant and consistent documentation of benefits (of continuing education) is absent'. They could find no convincing evidence that continuing education had led to changes in the health care provided by participants after the educational experiences. This is due partly to the failure to document the benefits that do occur, but equally it must be accepted that many attempts at continuing education are far less effective than they might be.

One reason for this lies in part with those responsible for teaching; few have any training as teachers. Clearly there is a need to provide training for those who are to teach in continuing education.

Another reason for lack of effectiveness is that the educational activities offered do not relate directly to the competences that the learner needs to acquire. Continuing education courses frequently consist of lectures and provide little practical activity for the learners. They are often based on the teacher's discipline or experience rather than on an analysis of what needs to be learnt.

An important study of a successful continuing education programme² showed that the teaching had the following characteristics.

¹ Bertram, D. A. & Brooks-Bertram, P. A. The evaluation of continuing medical education: a literature review. *Health education monographs*, 5: 330-363 (1977).

² Stein, L. S. The effectiveness of continuing medical education: eight research reports. *Journal of medical education*, 56: 103-110 (1981).

1. Teaching was designed to solve a specific problem recognized by the health workers.
2. The learners shared in the identification of the problem and the need to find a solution.
3. The learning methods emphasized participation by the learners, a non-threatening environment, and small-group methods.
4. The learners were involved in the evaluation of the outcomes of the educational experiences.

Logistic problems

Continuing education faces considerable difficulties simply because of the situation in which the potential learners are working. This commonly involves isolation from colleagues, difficulties of communication, a general lack of financial support, and a problem of defining who should be responsible. This results in the frequent failure to provide continuing education of an adequate quality and in a tendency for the health workers in greatest need (i.e., the most isolated) to receive the least attention.

The solution to these problems depends first of all on a recognition of the problems and the development of an adequately financed system. Such a system can then address the problems of isolation and communication, through the organization of local or regional meetings within the country and the use of distance-learning techniques, which may involve radio, television, postal courses, and the telephone.

Summary

Continuing education comprises the whole range of learning experiences available to health workers from the time of their initial qualification until retirement.

Appropriate continuing education is a vital part of health system management since it is one of the main ways in which the quality of work done by health workers can be maintained and improved.

A wide range of learning methods is available. Learning is most effective when the learner recognizes the relevance of what is to be learnt and takes an active part in the learning process.

Continuing education cannot solve all problems. What it can do is improve the use of available resources and help to ensure that the existing systems and procedures are implemented as effectively as possible.

For the purposes of this book a system is defined as a set of inter-related parts that work together to achieve a particular purpose. Continuing education can therefore be organized as a system when it involves a comprehensive approach, when the various issues and decisions in different sectors are coordinated, and when the support, expertise, and resources (political, technical, educational, financial, and managerial) from different institutions are brought together to provide a coherent programme of educational activities leading to progressive learning.

A continuing education system includes the people, policies, plans, functions, and facilities of several institutions and programmes that have agreed to work together rather than in isolation.

Thus, a system of continuing education is a coordinating mechanism for an intersectoral, multidisciplinary approach¹ to continuing education. The notion of a system as a 'coordinating mechanism' should allow sufficient flexibility for the system to assume the type of configuration that would best respond to the local or national situation.

A consequence of organizing continuing education as a system is that such a system will facilitate community participation, act as a catalyst for links between institutions, and ensure the coordinated use of resources from various sectors, agencies, and programmes.

The present situation

In some countries there is at least a semblance of a programme of continuing education for health workers. Yet often the continuing education that exists is piecemeal and erratic (therefore less effective than it might be) and sometimes even inappropriate. Another common problem is that while various individuals and institutions do have a concern with continuing education and carry out some

¹An intersectoral approach is one by which the health sector and other relevant sectors of the economy (such as education and agriculture) collaborate for the achievement of a common goal, the contributions of the different sectors being closely coordinated. A multidisciplinary approach refers to ways of managing a problem, so that traditional boundaries between disciplines are ignored and new functional and working relationships among participants are established.

activities, the various contributions are not coordinated. In this type of situation a system as such does not exist.

Current patterns of continuing education often have some or all of the following characteristics.

1. Participants are drawn from only a few professions and locations (usually medical specialists from metropolitan areas).
2. Sporadic meetings, usually lectures, are the main means of continuing education.
3. Lecturers are selected from a small pool of university professors.
4. Subject matter focuses exclusively on new clinical and therapeutic developments.
5. Activities are heavily sponsored by private enterprise, and the agenda often reflects commercial interest.
6. There are high rates of absenteeism due to family and social interests.

These examples of limited coverage of the target population and lack of response to the priority needs of the health system are matters of concern.

The need for continuing education

The need for continuing education has been recognized for a long time. Socrates and Plato considered education a lifelong process. Osler, in 1900, recognized the importance of this notion in the practice of medicine.¹ The subject of the Second World Conference on Medical Education was 'Medicine, a lifelong study'.² Continuing education has been the subject of increasingly active debate in the World Health Organization. This recognition was formalized at the Twenty-seventh World Health Assembly in 1974, which called on Member States to consider as a matter of urgency:

1. The development of national systems of continuing education for the health professions, based on national and local health needs and demands, integrated with health care and educational systems, with full utilization of the resources of universities and schools of health personnel.
2. The promotion of the systems approach in educational planning for continuing education and the periodic assessment of

¹ Osler, W. The importance of postgraduate study. *Lancet*, 14 July, 1900.

² *Medicine, a lifelong study: proceedings of the Second World Conference on Medical Education*, Chicago, 1969. Chicago, World Medical Association, 1971.

the quality of performance of health personnel in delivering preventive and curative health care.¹

This general need will increase over the next decade. A very high proportion of health workers have received their initial training quite recently. In 10 years' time many of those currently employed will still be in post, possibly in more senior positions. Yet their training will be 10 years out of date. Therefore, the quality of health care available to the world's population depends to a significant degree on the quality and availability of continuing education for health care personnel.

This need for continuing education arises for seven distinctly different reasons, and it is important to recognize how different they are since the type of educational activity selected will depend on the nature of the need for education. The seven reasons are:

1. The application of new knowledge, resources or approaches (e.g., the introduction of a new drug or piece of equipment, or a new approach such as the implementation of primary health care).
2. The desirability of adapting to changed health needs (e.g., demographic changes and changes in patterns of morbidity, mortality, or demand for services by the public).
3. The correction of inadequate or inappropriate training (e.g., lack of training in finding solutions to community health problems or the use, in training, of resources that are not available in the field).
4. The adaptation of health workers to a changing role (e.g., a change in the organization of the health service that leads to health workers being asked to carry out different kinds of work).
5. The need to remedy a deterioration in the quality of care provided by individual workers.
6. The preparation of health workers for promotion or change of job.
7. The need to respond to a health worker's own desire to learn.

Continuing education organized as a system

While the needs outlined above arise largely from a consideration of the part played by individual health workers in providing health care, the overall health system must also be considered. It is then

¹ WHO Handbook of resolutions and decisions, Volume II, Geneva, 1985, p. 71.

that the need for a system, rather than a set of *ad hoc* responses to the needs of individuals, becomes clear.

Frequently the health care system does not reach the whole population, uses staff who are inappropriately trained for the work they should be doing, perpetuates barriers between health workers rather than promoting a team approach, and fails to develop and use appropriate and economic technologies. Clearly, in order to remedy these defects there is a vital need to educate the health personnel. For this a system must be developed that integrates continuing education with current and anticipated developments in the health system.

Continuing education must also be seen as a part of management because it lies at the heart of work-improvement methods for implementing policies and introducing new approaches. For example, suppose that, in one country, a decision is taken to implement primary health care and to decentralize the management of the health services. This means that regional and district health staff will require greater expertise in management and planning, and so a national programme of continuing education will be needed to train the staff in these particular skills. This example illustrates the very close connection between national policy, the management of health services (including manpower development), and continuing education.

A unified approach

Perhaps one of the most important features of a system is that activities should function as an integrated whole—that is to say, the system should have a unified policy framework, in which relevant plans, human resources, institutions, and facilities can be co-ordinated or functionally integrated. The practical expression of coordination is a concentration of the relevant resources, which avoids duplication of effort and maximizes the involvement of workers. This in turn maximizes the impact on health.

The entire system can become a single working entity and not simply a sum of its component parts—the participating sectors, programmes, and institutions. As a system, continuing education must be seen as an indivisible whole, integrated with the entire health and manpower system within a country or district.

This unified approach is one way in which countries can apply the concept of a 'national health development network', in which the various sectors and agencies that have any influence on health development are coordinated in their approach. So continuing education is one endeavour in which this concept can have important practical consequences.

Relationships with other systems

Since continuing education is a means of improving work performance and not just an end in itself, the system of continuing

education cannot act completely independently but only in close relationship to the national health system as a whole and to the health manpower system in particular. These relationships have a number of practical implications.

1. Continuing education should be given an appropriate place within the national priorities for providing health care.
2. Continuing education requirements should be included in health manpower plans.
3. When continuing education identifies deficiencies in initial education, training institutions should be informed, so that their curricula can be revised appropriately.
4. Training institutions should ideally be involved not only in the provision of continuing education but also in assessing work performance and in the supervision of their graduates, so that initial education programmes remain relevant to the needs of the health care system.
5. Continuing education should be linked to other aspects of health manpower management such as career development, promotion, job satisfaction, incentive schemes, supervision, and performance appraisal.
6. The competences stressed in continuing education should be those that are considered relevant to the effective delivery of health care.
7. Supervision in the health care system should be used as one of the most effective methods of continuing education.

These examples illustrate only a few of the very many linkages that should occur and will be discussed in greater detail in Chapters 3 and 6.

Continuing education, then, is an integral part of the health manpower system of a country. It is functionally related to the entire health manpower development process and to each of its main elements—planning, production, and management. A system of continuing education should be coordinated with the health care system, to ensure relevance to health requirements, to permit sharing of resources, and to minimize overlap between the efforts of different agencies.

Comprehensiveness

The ultimate goal of a system of continuing education is to develop the competence of health workers so that the health of the population is improved. With the advent of the goal of health for all, which is to be achieved through primary health care, the target group for continuing education programmes has been expanded to

include all categories of health worker, not just physicians and nurses. Efforts should be made to address the learning needs of those who have least access to educational facilities—for example, field staff whose duties may require them to perform tasks for which they have not been trained and who have poor access to libraries, current journals, ongoing supervision, and organized programmes of continuing education.

Accessibility to women health workers

Many women health workers, unlike the majority of their male counterparts, devote a large proportion of their time to domestic duties, and this makes it more difficult for them to take part in continuing education. For this reason, systems of continuing education should include programmes that are available at the place of work during working hours.

Also, many women have to interrupt their careers to bear and rear children. In order to re-enter the health system, they will need retraining to help them update their knowledge and skill. They will also require support systems (e.g., child care facilities) so that they can take advantage of the learning opportunities provided.

Since upper-level managerial posts are seldom occupied by women, continuing education programmes should be offered to prepare more women for leadership positions. This effort should include programmes in leadership and interpersonal skills geared to the specific needs of women.

Efforts should also be made to ensure that all educational materials are free of sex-role stereotyping, that teaching/supervisory staff do not discriminate against women, and that women are not discriminated against in the selection of students for continuing education programmes.

To ensure women's full and effective participation in the health system, the system of continuing education must address women's specific circumstances and learning needs.

Requirement for an analysis of needs

What is learnt through continuing education should serve to maintain or extend the competences required for health care. Such education should therefore be relevant to three related needs: the health needs of the population, the organizational needs of the health care system, and the learning needs of individual health workers. This relevance is frequently *not* achieved where continuing education emphasizes knowledge to the exclusion of skills, describes 'recent clinical and therapeutic advances' without regard for the actual resources available, or fails to base educational activities on a prior analysis of needs and current programmes. Continuing education is satisfactory only if it is consistent with real problems recog-

nized by the community, the health system, and the health practitioners.

Continuity

A system should provide consistent education throughout the career of each health worker, rather than through occasional or sporadic interventions. The system of continuing education should provide education that is sequential and progressive. Unrelated meetings or refresher courses do not constitute a continuing education programme.

Internal coordination

Where several agencies provide continuing education, the contribution of each agency should be coordinated so that there is a minimum of overlap and a continuity of progressive learning. Whenever possible, resources and facilities should be shared. Thus institutions that work together in a system of continuing education must overcome self-interest and territorial feelings in order to develop a consensus on policies and programmes and to make arrangements that best encourage coordination and collaboration.

The system of continuing education should encourage professional associations, educational, service, research, and other relevant institutions to cooperate by sharing resources and by providing complementary educational programmes. Isolated institutions involved in uncoordinated efforts in continuing education do not make a system.

Conclusion

While a system of continuing education is a theoretically attractive concept, it must demonstrate its value in practice. This will be necessary in order to sustain the initial support given to the system and to develop and expand its programme.

The demonstration of value will depend on the competence, reputation, and dedication of the personnel involved in the system. It will also depend on their ability to create public awareness of their activities or on their success in building a positive image among health workers, participating agencies, and policy-makers. An important part of this image-building lies in giving credit to the contributions of participating institutions, since there is nothing more harmful to cooperation than a feeling of exploitation.

The perceived value of the continuing education system will, of course, be substantially influenced by the value placed on the training provided and by its contribution to an improved relevance and quality of health care.

A good example of the characteristics outlined in this chapter is to be found in the experience of Cuba in developing a comprehensive system of continuing education, an account of which is given in Annexes 1 and 2 of this book. Annex 1 describes how continuing education has evolved in Cuba and gives information on its organizational arrangements, underlying principles, and main programme activities. Annex 2 describes the National Centre for Further Training in the Health Professions in terms of historical background, scope, objectives, and structures.

From this it is possible to discern the role of the institute in continuing the education of health personnel in Cuba. These annexes are also relevant to Chapter 7, on organizational structures for continuing education.

Summary

A system of continuing education includes the people, policies, plans, and facilities of the institutions and agencies that have agreed to work together to provide continuing education for health workers. Such a system should:

- Adopt a unified approach.

- Be integrated with the health manpower planning, health manpower production, and health manpower management functions.

- Provide a comprehensive programme for all categories of health workers.

- Pay particular attention to the needs of women health workers.

- Base the educational activities on an analysis of needs.

- Provide education that is sequential and progressive.

- Coordinate the activities of the various agencies.

Assessing the needs for continuing education (and making intelligent use of this assessment) is possibly the most important function of a system of continuing education. This importance is made clear when current programmes of continuing education are studied, for many of them do not even attempt to respond to the real problems and needs of the community or the health system. As a result the continuing education they provide is of little value.

The needs for continuing education arise from three general areas—the problems faced by the community, the needs of the health system in its attempt to meet the standards of care required, and the problems recognized by the health workers themselves in performing their work.

Many of the data needed to assess the needs from these three areas are already available and need only to be identified and analysed. Other data will have to be collected.

Clearly, the amount of information that could in principle be collected is enormous, and a balance must be achieved between, on the one hand, collecting sufficient information to provide a precise and detailed description of needs and, on the other hand, doing a minimal analysis and then using the available energy and resources to respond to the identified needs. The exact point of balance will depend on the particular circumstances.

Why needs should be assessed

When continuing education is relevant to the real needs of the community, the health system, or the health worker, three benefits result. First, the continuing education is much more likely to have an impact on the way health care is provided—which in turn will lead to improvements in the health of the community. Second, because the continuing education has an impact on health care, the cost of providing it can be justified by the direct benefits. Third, the continuing education becomes more meaningful to the health workers themselves, and they are much more likely to be motivated to take part, to learn, and to apply what they learn to their daily work.

The above arguments relate to the relevance of continuing education rather than to the analysis of needs, but the two are directly linked since continuing education can be relevant only if it is relevant to the needs. Hence the analysis of needs is an essential stage in ensuring the relevance of programmes.

A further advantage of needs analysis is that it is likely to provide baseline data concerning the provision of health care and the performance of health workers. This can then be used as a basis for evaluation of the continuing education programme to ascertain whether it has led to changes in these areas.

The community needs

The needs of a community for a programme of continuing education of health workers can be expressed in three main ways. Society can express its dissatisfaction with the quality of service provided by the health care system. This can be stated through community health councils, consumer groups, community action groups, village health committees, or political organizations. Certainly, as the concept of community participation becomes increasingly accepted and applied to a wider range of activities, the needs of society are likely to be both more apparent and more explicitly stated. In many countries, however, this direct expression of dissatisfaction is unusual, and the needs of society are then expressed through the way in which services are used, although the pattern of usage is sometimes difficult to interpret. For example, if a health centre is attended by only a small number of people, does this mean that the services offered are not needed or does it mean that the services are offered in a way that is unacceptable to the community?

A community's needs are also expressed through the state of health of its community. This can be summarized as an epidemiological profile of the community giving data on the patterns of morbidity and mortality as well as various health indicators such as infant mortality rates. If these data show a high incidence of preventable disease such as ascariasis or measles, it may be that the provision of health care is unsatisfactory, perhaps because of inappropriate patterns of working that could be remedied by continuing education. However, the absolute lack of resources is also a factor to be considered.

The needs of the health care system

The health care system itself can have needs for continuing education. Continuing education should be seen as a part of management, which in turn is a component of the health care system. Therefore where the health care system fails to meet its own objectives there may be a weakness in the skills of the health service employees, which can be remedied by continuing education. Again it must be pointed out that plans and objectives may not be fulfilled simply because they are unrealistic or because insufficient resources are available.

The health system's needs for continuing education overlap to some extent with the needs of society, since the health system

should aim to satisfy the demands of society for health care. Therefore all the expressions of need outlined in the previous section apply in this section also.

Needs additional to these are expressed through a health service profile, which describes quantitatively and qualitatively the work done by the health system. This can compare the service provided to different groups where such groups are defined in terms of sex, age, and geographical, social, and cultural factors. Generally such health service profiles are described in general quantitative terms (number of immunizations carried out, number of pregnant women receiving antenatal care, etc.). However, it is also possible to be more detailed and specific by looking at the work of individual health workers using the general technique of work study, which includes performance assessment, supervision, and audit.

All these studies may show deficiencies in the quality of care provided for the community and so imply a need for the health system to improve. Many of these improvements can be facilitated by continuing education.

The needs of the health workers

The needs of individual health workers may result from deficiencies in their performance of specific tasks. These needs may coincide with the health system needs. For example, a health worker who fails to store vaccine at an appropriate temperature represents a health system need for improvement, as well as an individual need.

There are other areas in which the individual's needs are distinct and identifiable. Health workers who are especially worried about their capacity to carry out a regular procedure may want further training to remedy this situation. A health worker who is ambitious and eager for promotion may wish to prepare for a different job. A health worker who has identified a problem in the community but does not know how to solve it may wish to seek guidance. In all these situations the need for continuing education may be initiated by the individual health worker.

Methods of assessment

The very wide range of possible needs, outlined above, can be assessed in various ways. The methods available for this assessment do not correspond exclusively to any one of the categories of need but can often be applied to different areas of need.

Epidemiological profile

The epidemiological profile of a community is an overview of the main causes of death and the most prevalent diseases and resulting

disability. The profile may describe these characteristics by geographical area, age, sex, etc. The data are generally expressed in terms of health indicators, which are variables measuring selected characteristics of the health status of a population at a given time and changes in that health status over a period of time.

The following list of health status indicators¹ can serve as a broad framework for developing an epidemiological profile of a community:

Nutritional status and psychosocial development.

Infant mortality rate.

Child mortality rate (ages 1-4 years inclusive).

Maternal mortality rate.

Crude birth rate.

Life expectancy at birth or at other specific ages.

Cause-specific death rate.

Proportionate mortality by specific disease.

Morbidity (incidence and prevalence).

Long-term disability (prevalence).

It is not suggested that the continuing education system should conduct major surveys to establish these data but rather that existing data should be consulted. Generally the following sources may be used:

National health plans and programmes.

Surveys.

Vital events registers.

Population and housing census.

Routine health services records.

Epidemiological survey data.

Disease registers.

In most countries national health plans exist that give information on the main causes of death and the most prevalent diseases. A health plan also contains information on resources available and their deployment. It stipulates the objectives and targets, the activities to be carried out, and a timetable to be followed. Health

¹ *Development of indicators for monitoring progress towards health for all by the year 2000*. Geneva, World Health Organization, 1981 ("Health for All" Series, No. 4).

plans therefore constitute a valuable source of information from which to draw the epidemiological profile and the pattern of use of existing health services. It also contains data on health resources, manpower, finance, and information services.

Community surveys

Surveys may be used to draw up and supplement the health profile of a community. These surveys are generally based on a list of questions, the responses to which can provide either objective or subjective information or a combination of both.

Surveys represent a very practical and popular method of obtaining information on a specific area of concern within a group, a community, or an organization and can therefore be useful in assessing societal needs, health system needs, and individual needs for continuing education. Surveys can be simple, inexpensive, and quick to carry out.

A survey is often the only practical way of obtaining certain types of information—for example, people's perception of illness and their reactions to it, local health conditions, attitudes of respondents towards local health services, and the perceived need for work improvement.

Well designed questionnaires and clear questions will contribute to a satisfactory response rate and will reduce ambiguity in the responses.

The survey method should become the tool of all senior health service personnel and of educators in the health fields who require information about the community they serve and about the people they are teaching. However, the objectives must be clearly stated, the target group clearly defined, and the constraints realistically identified.

Surveys are also useful for assessing the continuing education needs of various individuals and groups within a health system. Among the many purposes to which the survey method can be applied are:

1. To elicit the opinion of health workers of their own individual needs for continuing education.
2. To assess the attitudes of community members and health workers towards each other.
3. To assess both public and professional opinion on the quality of health care delivered before and after programmes of continuing education.

Health service profile

A health service profile determines what human and financial resources a health system (or part of it) has at its disposal. It also

reflects how well health managers allocate and use health resources to deal with the health problems of a community.

The profile should contain information on geographical distribution of health care institutions, with the types and number of staff employed by each. The profile might also cover information on the characteristics of the users or potential users of health services, such as the number and type of people who made use of the health institutions in a specific period, the number of people immunized, the number of people seen (by disease), and the number who do not have access to the currently available health services. Information of this nature can often be obtained from hospital and health centre records.

Surveys and health plans may also be used to obtain the information needed for a health service profile.

Referral patterns

The complexity and cost of health care has given rise to referral systems, which stratify the various institutions in a health care system according to level of sophistication. Organizational and functional links are developed between the simplest health facilities in small communities and progressively more complex institutions. The aim is to develop a process of referral of patients so that the more complex institutions are not overloaded with problems that could be dealt with at the lower echelons of the health system and so that patients are referred back to those who sent them, accompanied by information on action taken and guidance for follow-up.

Referral patterns can be analysed to identify inappropriate practices and to assess the clinical and managerial competence of health workers, thus determining the continuing education needs of individuals and groups of health workers.

Referral patterns may also indicate the level of sophistication of a health centre and the degree to which health workers handle the technological aids and other resources made available for their use. For example, a health centre may have equipment that health workers cannot operate appropriately. It may be that they are not aware of its use for some clinical interventions or that they are not maintaining it properly. Only a critical analysis of the whole situation will identify the precise nature of continuing education needs.

Work study

A more detailed profile of the health service can be made by assessing the way in which individual health workers carry out their work. Work study is a general term for this process. Its overall aim is to describe and analyse the work done by health workers in the context of the job description, work norms and standards, and the resources available. It can continue by analysing in detail the

components of each task carried out by the health worker and the knowledge, attitudes, and skills required to carry out the task. Thus work study can be used to provide an effective basis for planning relevant training programmes.

The idea of work norms or standards should be explained at this point. Many health systems have found it useful to specify the quality and/or quantity of work expected of the different kinds of health worker. For example, the proportion of children who should be immunized in the area of a health centre may be specified; or one might list the features of a satisfactory examination of pregnant women. In both cases, work norms or standards are defined. A work study can therefore compare what a health worker actually does with the work norms. Or where work norms do not exist, a work study can be carried out to discover what a particular category of health worker is capable of achieving and thereby establish work norms or standards.

The successful study of work begins with the help of the workers themselves and should include a description of the characteristics of the setting in which the work is done. Work study is therefore different from task lists or inventories, in which a health worker's daily activities are simply listed without regard to all the considerations involved in their analysis. A work study describes how a certain activity is carried out in a given setting and should suggest the competence required for the work and identify any equipment needed.

In order to assess what the health worker needs in terms of knowledge, skills, and attitudes to perform the required job effectively, the job must first be described and put into the context of the particular health care setting in which it is performed. A job description is therefore a basis for a work study as well as a possible outcome of such a study. Without a job description that explains exactly what activities, tasks, and duties are required, there will be no baseline from which to assess the health worker's performance. At the same time, findings of a work study can be used to rewrite a job description or to improve the relevance and specificity of an existing one. A job specification indicates the experience, education, level of authority, and other qualifications required for a job, but it rarely indicates the specific knowledge, skills, and attitudes required for the performance of a task.

Work study as outlined above may be carried out in many different ways. It can be implemented on a national or local level. It can be concerned with the numbers of activities (such as home visits) performed or with a detailed study of the quality of the performance. It can simply describe the work or it can analyse the detailed knowledge and skills required in the performance of a task. The level of detail and the content of the work study can be determined only by the purpose for which it is intended.

Work study is an essential stage in the definition of needs for either initial training or continuing education.

Performance assessment

Performance assessment is another technique useful in assessing needs for continuing education. It has many features in common with work study but is much narrower and perhaps best thought of as one of its components. Performance assessment is primarily a method of appraising an individual's work in the context of his or her institutional and community setting. It consists of making judgments about the relevance of the worker's performance to the needs of the individual, the organization, and society, based on the observation and analysis of the work done. The appraisal thus aims to identify an individual's strengths and weaknesses and should be followed by joint planning of any necessary remedial education. The assessment is intended to determine how thoroughly and efficiently a health worker performs the duties; how competently promotional and preventive measures, and diagnostic and therapeutic procedures are chosen and applied; how ably problems are identified and solved; how effectively and economically health resources are used; how well the health worker communicates with patients, supervisors, and colleagues; and how easily the health worker interacts with different people in the performance of his or her duties.

The following guiding principles¹ should be applied.

1. The assessment should be objective and replicable, so that two observers assessing the same person in the same task should come up with similar results.
2. The assessment should focus on the most critical aspects of the job, that is to say those in which any weakness in performance would have a serious effect on the outcome.
3. The tasks assessed should be representative so that they give an indication of how well the health worker performs all the tasks.
4. The most critical aspects of performance should be assessed by more than one method.
5. The assessment should predict future performance so that the observer can gauge how the health worker might perform the same task on other occasions.
6. The assessment procedure should provide a guide to learning.
7. The assessment technique should be practical and should yield the most useful information for the lowest cost in time and money.

¹ Katz, F. M. & Snow, R. *Assessing health workers' performance: a manual for training and supervision*. Geneva, World Health Organization, 1980 (Public Health Papers, No. 72).

An important prerequisite in the assessment of any health worker's performance is the establishment of criteria upon which to base the assessment. The criteria are often in the form of checklists, which can help both in observing whether the health worker meets the required standards and in providing guidance to the health worker on ways in which the performance can be improved. It follows that an appropriate supervisor's rating form would identify relevant aspects of performance and of behaviour. Care should be taken to make the observation unobtrusively and to observe repeatedly; only then will it become obvious whether the health worker is not only able to perform and behave appropriately but also willing to do so.

Performance assessment carried out to determine the subject matter of continuing education tends to be more detailed and precise when the education is directed at technical issues than it does when the education is for general managerial purposes. Annex 3 to this book outlines the sequence of steps involved in the annual performance assessment in a health centre setting and provides an example of such assessment. Annex 4 provides an example of a survey of health workers' needs and problems as part of a baseline survey to determine the needs of continuing education. Annex 5 illustrates how one might develop a specific clinical activity to evaluate or teach an ability related to the performance of a particular task.

Supervision

Supervision is an important mechanism for obtaining information on problems encountered in the implementation of health programmes. It is also an educational device. Thus the effective supervisor is both a manager and an educator, perhaps more the latter than the former. As a manager, the supervisor controls the activities of others. To the members of the health team, the supervisor is their contact with management. As an educator, the supervisor is called upon to help health workers identify weaknesses and deficiencies in their performance and to demonstrate on the spot how such weaknesses might be overcome or provide subsequent learning opportunities.

In the assessment of the need for continuing education, the supervisor should play the pivotal role of liaison between the health workers and those responsible for planning programmes of continuing education. The information required by planners to construct programmes that are relevant to health workers' needs is processed through the supervisor on the basis of his or her appraisal of those needs. This requires the supervisor to be objective, to maintain continuous channels of communication, and to have a sound knowledge of standards of performance.

A supervisor's main responsibility is to lead people to perform a given task satisfactorily, according to set norms of care and standards of performance. The supervisor must therefore be fully aware of the needs of the tasks, the needs of the individuals, the needs of

the team, and the needs of the health system. He or she must be able to reconcile all these needs and relate them to the conditions in the work setting.

Health care audit

Although the health care audit technique has evolved mainly for use with physicians and nurses in hospital settings, the basic procedures can be used with other kinds of health worker. Audit looks back to see if the services that have been provided by health workers as a team have met established standards. Determination of the quality of health care is based on a comparison of what was done, with what should have been done, and of how it was done, with how it should have been done. Norms of health care and standards of performance are essential prerequisites for a health care audit, as they are for supervision.

The health care worker completes a problem-solving analysis¹ of selected patients' records. However, to serve as the basis for a health care audit, records should be organized around the problems of one patient, one group of patients, or one health institution (or part of it). They should include information about the nature of a given problem, the situational and personal factors that seem to be associated with it, the diagnosis or explanation of its probable causes, the planned remedy, and the expected outcome in terms of both the clinical and the managerial implications. When dealing with a large number of patients or a large section of a health care centre, an effort is usually made to take random or probability samples representative of individuals' records or observations.

People of approximately equal standing could meet together to examine a specific problem in their work and to discuss how they would handle the problem in order to establish standards and targets for the improvement of subsequent performances. While it is unnecessary to exhaust all possible sources of information or to collect data on all aspects of performance, no single method or source of information can provide all the relevant data required to assess the needs for continuing education.

Two other forms of audit should be considered—the clinical-pathological conference and the clinical-epidemiological conference. A clinical-pathological conference represents a form of health care audit by colleagues on the quality of care delivered to an individual patient. It is a form of peer review. The analysis is made by qualified health practitioners from a range of disciplines and professions on the basis of the clinical history as stated in the patient's record. Clinical-pathological conferences focus on the relevance of what was done for the patient and how this could have been improved in

¹ Generally speaking, problem solving is a systematic effort to identify problems, propose solutions, select and implement one of those solutions, and evaluate the consequences.

terms of diagnosis, treatment, comfort, support, and cost. The health care provided to patients is analysed to identify weaknesses, omissions, or mistakes in the management of each case by each type of health worker, by a health team, or by the whole institution. This provides a means of learning from experience how to improve the quality of care given.

Instead of considering individual patients, health centres may carry out clinical-epidemiological conferences. Here, priority is assigned to a given area of practice. One possible way of selecting the area on which to concentrate is to identify health problems that cause the greatest amount of preventable disability, or health problems that are most common in the health facility concerned, or health problems that show a high rate of mismanagement or of which mismanagement may lead to severe consequences (poor quality of services, high fatality rate, high cost, etc.).

Participation in planning and conducting such exercises increases the health worker's commitment to respond to the results.

Sometimes audit committees can be established by the health care facility and are made up of those responsible for establishing the standard of care to be met by health workers. Audit committees might be established to determine performance standards against which to appraise actual performance. Where audit committees are composed of outside practitioners, performance standards should be clearly spelt out and agreed on with those whose performance is to be assessed. Health workers may respond more favourably to colleagues with whom they are used to working rather than to an outside committee of assessors.

When the gap between what was done and what should have been done has been identified, objectives for any necessary continuing education can be formulated, and it becomes possible to determine the relative emphasis that should be placed on knowledge, skill, attitude, or performance for such educational activities.

Critical-incident studies

Critical-incident studies are a fairly simple method of helping health workers to identify their own needs for continuing education. Health workers are asked to describe five or six recent events when they felt uncertain how to handle the situation. These situations are the 'critical incidents'. Such questioning can be repeated for a sample of health workers to establish whether there is a widespread need for further training or whether initial education should be improved. Critical-incident studies may also reveal difficulties in interpersonal relationships with other members of the health team or with patients.

Descriptions of critical incidents need not be expressed in quantitative terms. A good description of a critical incident will include indications of knowledge, judgement, and temperamental ability to make decisions. Descriptions of this kind may seem to be subjective

in nature, but they can offer many insights into the health worker's knowledge, skill, and attitudes.

Diagnostic assessment of knowledge

Without knowledge and understanding it is not possible to make reasoned decisions in the practice of health care. For example, it is not possible to advise mothers on appropriate feeding of babies without knowledge of child growth and development, nutrition, and hygiene. It follows that lack of knowledge may be a cause of inappropriate action by a health worker. Thus, when deficiency in a health worker's performance has been observed, it will be useful to identify whether lack of knowledge is indeed the underlying cause. This can be done through an interview or a written test. Where deficiencies have been found in a single health worker, the interview, with well chosen questions, is likely to be of more specific diagnostic value. The health worker can be asked to explain the reasons for acting or not acting in a certain way. The reasons will quickly reveal whether there was a gap in knowledge or whether the knowledge could not be applied.

Where a number of health workers appear to have similar difficulties, multiple-choice questions or modified essay questions will be quicker than an oral test. Such written tests can also be used to establish the extent of knowledge of a group of health workers before a programme of continuing education is planned.

A possible strategy for assessing needs

It is not necessary to use all the methods outlined in this chapter to assess needs. So, in a given situation, which methods should be used?

It is probably helpful to think of macro versus micro levels of needs analysis—in other words, the broad picture versus the fine detail. Initially the overall pattern of needs should be established. This can be done by looking at national epidemiological data or by considering the overall health service profile. Community organizations may already have identified general problems, and health service managers may have formed opinions on common deficiencies. The following are examples of the kind of broad problems that might emerge from this procedure.

District medical officers are ineffective in personnel management.

Medical assistants are not doing enough to stimulate community participation.

The incidence of measles is not decreasing fast enough.

The quantity and cost of drugs prescribed is increasing too quickly.

Health workers are unwilling to accept postings to remote places.

When the problems have been identified a selection must be made according to national priorities, so that a list of a few priority areas for continuing education can be agreed on.

The second stage of the strategy is to investigate the selected areas in greater detail, using work study, performance assessment, and so on, in order to find out in detail what the relevant group of health workers actually does. The aim of this detailed stage is not to obtain precise quantitative data about the behaviour of large representative samples of health workers, but to gain insight into what a few health workers actually do, which would explain the problem. The aim is diagnosis, so that the specific continuing education treatment can be 'prescribed'.

As an example, let us assume that it has been agreed that the poor performance of district medical officers as personnel managers is an area of high priority. The second stage will consist of observing district medical officers in their relationships with health personnel. Do they provide supportive supervision? Are they able to offer constructive advice clearly and in a way that is accepted by the health worker? Do they attempt to establish appropriate standards of work? How do they do this? How do they conduct business meetings? What problems do the district medical officers perceive in their own management of health personnel? Annex 6 shows how a baseline survey can be used to help identify performance deficiencies.

This more detailed observation and discussion will help to identify the skills that are particularly weak and will therefore constitute the core of the continuing education programme. The detailed needs analysis will help the educationalist to avoid the trap of providing a general academic course on, for example, personnel management; instead specific skills that can actually be used in the field will be taught. In other words, relevance will be ensured.

Summary

Analysing the needs for continuing education is possibly the most important function of a system of continuing education.

Without needs analysis there is no way of knowing whether the provision of continuing education is relevant or of value. When needs analysis is carried out and applied to the planning of the educational programme, relevance is guaranteed.

Much of the information required for an analysis of needs is likely to be available in documents such as national health plans.

Additional data may be collected using surveys, work studies, performance assessments, supervision reports, etc.

The end-point of needs analysis should be an indication for each kind of health worker of the number of them needing continuing education and the things they need to learn.

HOW TO WRITE A POLICY STATEMENT

This chapter offers guidance on the preparation of a policy document for the establishment of a system of continuing education at national, regional, or local level.

The production of a policy document involves a sequence of steps, which will be discussed in the order in which they arise.

Why have a policy?

An effective and efficient system of continuing education requires close collaboration between (and therefore appropriate coordination of) the activities and organizations concerned with the planning, production, and management of health manpower. It will be clear that this will involve government, health care and educational institutions, labour unions, and professional associations. Unless the aims, organization, and methods of continuing education are agreed on among these participating bodies, the necessary finance may not be available and effort will be wasted through duplication or working at cross-purposes.

Why have a policy statement?

A policy should be a clear statement of intent for adoption by a government, political party, health authority, professional association, labour union, institution, or group of individuals who wish to work together to further an agreed set of objectives. Once the policy has been agreed, the statement should make it possible to implement the policy.

The policy document containing this statement may also include the background data and arguments that justify the policy. It should convince the various organizations of the importance of collaboration. Subsequently, the policy statement should act as a guide to the establishment and functioning of a coordinated system of continuing education.

Steps leading to a policy statement

The following questions should be answered to ensure that the policy document provides sufficient and appropriate information and argument.

Who should plan the policy statement and what are their terms of reference?

What are the needs for continuing education?

What, therefore, are the goals of continuing education?

What are the organizational and financial resources needed to achieve these goals?

What are the current and proposed legislative and organizational policies and practices?

How can the requirements for achieving the goals be reconciled with existing and proposed policies and practices?

Careful consideration of these questions will lead to the writing of a well argued policy.

Who should plan the policy and what are their terms of reference?

It is important that the formulation of policy should involve wide participation because of the complex relationship between continuing education and other systems and subsystems. For example, there is likely to be close interaction with the health service and with education and employment policies. Without participation of the many groups who will be affected, the policy is less likely to be accepted and less likely to succeed, whatever its intrinsic merits.

Many of the groups that will be affected by the policy have historically worked separately from each other. However, it will be necessary for them to coordinate their efforts and overcome self-interest. Special-interest groups, such as professional medical associations, are likely to oppose any policy that they feel would detract from their interests. However, input from these groups will be needed, and it will be necessary to convince them that they will benefit from a comprehensive system of continuing education.

Besides legislators, politicians, and appointees of the ministries of health and education, the policy-writing group should include representatives of:

the community;

civil service commissions or boards;

professional and scientific associations concerned with the conditions of work and the education of their members;

health workers' unions;

institutions for initial training, including medical, nursing, and dental schools;

other groups concerned with current problems of continuing education.

As such a representative group is likely to be too large for constructive deliberations to take place, it may have to be convened only occasionally as a plenary body. It should be encouraged to elect subcommittees or working parties, which would report back at regular intervals. The main emphasis should be on establishing good communication with the parent organizations and to permit everyone to feel involved in the decision-making process. It should not be forgotten that a truly representative policy-writing group will have more credibility than a small group, which can be accused of self-interest or special pleading.

Once a policy-writing group has been established, it must agree on its terms of reference. These should specify:

- the objectives, i.e., to formulate a policy on continuing education and to write the policy document;

- the type of activities to be carried out;

- the role and duty of members, including which individuals and groups are to be involved in the actual writing of the successive policy papers leading up to, and including, the policy document;

- the financial, technical, and human resources available;

- the timetable for completion of the tasks.

What are the needs for continuing education?

The questions that must be addressed at this stage are as follows:

- What are the needs?

- How many health workers are affected?

- Where are they located?

- How are the needs measured and in what terms are they expressed?

- Why is a 'system' of continuing education needed?

Many situations give rise to the need for continuing education. They include:

- new knowledge, resources or approaches;

- changing health needs;

- inadequate or inappropriate initial training;

- the changing role of health workers;

- a deterioration in competence and therefore in quality of care provided by individual workers;

- promotion or change of job;

- the health worker's own need to learn.

In preparing a statement of the problem and an analysis of the situation, it will be necessary to investigate the overall health care delivery system to determine whether such situations exist.

The need for a system of continuing education must be justified. There are many reasons for organizing a programme of continuing education as an integrated system.

1. Most continuing education programmes are planned and carried out in a piecemeal fashion, making them ineffective and inappropriate.
2. Continuing education must be made relevant to the health needs of the people, the organizational needs of health systems, and/or the learning needs of health workers.
3. In most countries, a single organization or agency for continuing education is likely to lack the resources needed for the development of continuing education programmes that are comprehensive in size and scope and relevant to the needs.
4. The complex nature of the process of determining the learning needs of health workers requires the coordinated and collaborative efforts of all health workers, professional associations, and service and training institutions.
5. The components of a continuing education system—people, policies, plans, programmes, institutions, and facilities—must work together, adopting a systems approach and as part of larger coordinating mechanisms for the integrated development of health services and human resources and of national health development networks where these exist.

Various techniques and sources of information may be used in order to 'get the facts' required for identifying the needs and writing the situation analysis.

1. Study the national health programme to ensure that the need for continuing education or supervision implied in it is taken into account.
2. Identify the needs of the health care system by investigating the occurrence of prevalent diseases and by studying working procedures to identify weaknesses.
3. Consult all potentially cooperating institutions in order to identify their expectations.
4. Identify the needs for continuing education expressed by individual health workers or their representative organizations.
5. Identify the expectations of the potential funding agencies.

For a more detailed discussion of these points, see Chapter 3 on the assessment of needs.

Setting goals

The needs that have been identified and analysed should be translated into general goals or targets of the proposed system of continuing education. They should be expressed in terms of what it is hoped will be achieved over the next few years. This will involve some general idea of the scale of educational activities envisaged, together with a broad indication of the time scale.

The organizational and financial implications

The drafting committee must consider the logistic implications of their goals for continuing education. It is suggested that four questions be considered.

1. What institutions should be involved in planning and implementing the programmes?
2. Should the support facilities be centralized or decentralized?
3. What is the overall scale of operation likely to be?
4. What levels of finance will be needed?

Thought given to the nature and interrelationship of organizations and their prospective roles in continuing education will show how their activities might be coordinated. Similarly, a consideration of the support facilities—e.g., printing, audiovisual production, and library resources—will contribute to an assessment of the overall scale of the system and the magnitude of additional financial support that may be required.

Gauging the political climate

Consideration should be given to how the desired organization and the proposals for implementation can take advantage of, or be adjusted to, existing practices and policies. How will any proposed new practices or policies affect the ideas and plans of the policy-writing group?

It will be advantageous to identify and consider what the various organizations and institutions do already in relation to continuing education and how their actions are organized and implemented.

An analysis of existing and planned policies and legislation ought to be carried out to ascertain the likely prospects of ensuring consistency and bringing about change. Policies are generally formulated on the basis of, and within the context of, other governmental or institutional policies. For example, public sector health workers on the payroll of the ministry of health might be subject to existing civil service regulations. It would then be necessary to review

civil service statutes, in order to ascertain whether or not they are compatible with a proposed policy for a system of continuing education.

Or, if a country has a policy on primary health care and one on the integrated development of health services and health personnel, such existing policies might set the stage for a policy on the development of a comprehensive system of continuing education.

The policy analysis paper should contain an overview of existing supportive policies and legislation that provide a framework within which the policy on a system of continuing education may be formulated. The existing policies and legislation will also provide an idea of the political climate and can serve as a justification to those who must officially sanction the proposed policy.

Specifying the strategies

All the information assembled during the earlier phases of planning can now be considered in relation to the last step. This will show to what extent the group's plans should be adjusted to take account of current and proposed policies and practices.

The general strategies to be employed in order to achieve the goals should also be described. This will involve a description in general terms of: the administrative arrangements among participating agencies; the general scale of the exercise, including indications of the number and type of staff to be involved in implementing the policy; the number, categories, and location of health workers involved; the general kinds of educational activities to be planned; and the educational institutions involved.

The development of strategies to achieve the agreed goals of a system of continuing education begins with a listing of choices for action, or policy options.

The identification and analysis of policy options involves much anticipation and value judgement. The objective of the process is to develop a policy option or a package of policy options that is most likely to be acceptable to the policy-makers and to the groups most directly affected by that policy. Considerable uncertainty is inherent in the estimation of the possible consequences of each option, particularly when information on previous or similar policies is not available. A certain amount of generalization and estimation is to be expected; however, the processes of option appraisal and constraint analysis will reduce the likelihood of arriving at impractical or unacceptable policy options.

Appraising policy options

In order to arrive at a package of acceptable or feasible options, each proposed alternative may be appraised in response to the following considerations:

Identification of the people who will be involved in approving, implementing, and financing the action.

Description and quantification of expected outcomes.

Estimation of the time that will be needed to realize expected outcomes.

Estimation of capital and operational costs.

Estimation of income.

The need for legislation.

The requirements for preliminary action (local or national).

The assessments of political and cultural acceptability.

The potential side-effects and the identification of new problems that may be generated.

The data needed to monitor the implementation of policies and to measure progress.

In the process of appraising each alternative or policy option, it will become evident that several options may not be feasible and that some are more feasible or 'acceptable' than others.

The feasibility of each policy option may be analysed further in terms of its constraints. This analysis includes response to the following:

The nature of the constraints: political, financial, organizational, cultural.

The immutability of the constraints.

The level at which the constraints are imposed (national, local, etc.).

The prospects of overcoming the constraints in a reasonable time.

Feasible options that have been arrived at through option appraisal should be consolidated in a structured manner, outlining the goals to be achieved, the difficulties that will have to be overcome, the cost, the time required, and the expected outcomes.

Writing the policy document

The policy document is a distillation of the outcomes of the earlier steps. It should therefore present each important element in a very succinct manner. The introduction to the policy document is likely to include:

A brief summary of all those who have been involved in policy formulation.

An overview of the terms of reference.

A statement of the problem.

A brief summary of the situation analysis.

A brief overview of existing policies and legislation that are supportive of the proposed policy.

A statement or description of similar past efforts (if any) to formulate a policy on a system of continuing education.

A description of existing activities in continuing education that support the proposed policy.

The operative section of the policy document will include:

The goals of the proposed system of continuing education.

The general strategies needed to achieve the goals.

The organizational and administrative arrangements and their interrelationships.

General provisions (public relations activities, resolution of disagreements, etc.).

The financial and economic arrangements (including control of expenditure, salaries, etc.).

The terms of reference or statutes of a proposed commission or agency responsible for implementing and evaluating the policy.

Keeping the policy on the agenda: promotional activities

Much work of a promotional nature needs to be done to elicit and maintain support for the proposed policy. In the case of a grass-roots initiative to formulate policy, the policy document needs to be brought to the attention of policy-makers.

Specific efforts may involve writing formally to ministers or other national representatives and to decision-making bodies. A copy of the policy document would be attached to such letters, which should also include a statement of need as expressed in the policy document as well as an explanation and description of work currently in progress by the group.

Other methods of persuading policy-makers of the need for the proposed policy may include letters to national representatives by the potential beneficiaries in the continuing education programme, media campaigns, seminars and meetings. The objective is to ensure that the policy is as widely publicized as possible.

Those who have prepared a policy document with government sanction should not neglect promotional activities. Even if the policy has originated from policy-making bodies, efforts will be required to stimulate public interest and support. Policy-makers are

responsible to their constituencies, and funds for continuing education systems may be allocated, at least in part, from public funds. Constituencies must be convinced that the proposed policy is in their interest. Policy-makers may themselves mount a campaign to elicit public support.

The way in which the policy document is finally transformed into officially sanctioned policy will depend on the decision-making process of each country or part of a country. However, even when a policy is officially adopted (at a decision-making level), this by no means implies that promotional activities aimed at securing support for the policy must cease. The adoption of a policy may not necessarily be followed by implementation. It will therefore be necessary to maintain the active support of the public, the health workers, heads of institutes and agencies, teachers and trainers, and ministries, in order to 'keep the policy on the agenda' of agencies, institutions, and ministries.

Policy formulation: a progressive process

Once national policy-makers have taken note of privately initiated efforts for a comprehensive national system for continuing education, they will want to review the policy document. In the light of information that might not have been available to the original group, they may also want to revise it in terms that they regard as more politically or financially feasible. It is not necessary to formulate an all-embracing policy to begin with. Those involved in the process may wish to start in a small way, perhaps addressing the continuing education needs of only one or two broad categories of health workers. When the initial plans have been implemented and evaluated, it may be possible to expand the system into a comprehensive national one.

As the political, financial, and technical circumstances of a country change, the policy and programmes should be correspondingly adapted. The policy should thus be expressed in a flexible way, though it should be precise enough to avoid ambiguities. The policy should be steadily developed in the light of the experience gained in its implementation and the continually evolving needs for continuing education.

Annex 6 to this book outlines a number of issues often considered when a policy statement is being prepared. However, it is not meant to be either prescriptive or exhaustive and must be interpreted with great flexibility.

SOME ACTIVITIES OF A SYSTEM

This chapter provides an outline of some of the activities that a system of continuing education might involve. This list is not exhaustive, but it does indicate that a system of continuing education should involve much more than just teaching, and it may stimulate thinking about additional areas that may need to be considered.

One overall function of a system of continuing education is to coordinate the activities of the various components of the system and of related systems. For example, it should ensure that the needs for continuing education identified by one component of the system directly influence what is taught by other components. Another example of coordination would be in ensuring that health workers who are trained in a particular skill are encouraged by their supervising officer to use that skill in their daily work.

A second overall function of a system of continuing education is to provide support services for its various components—e.g., the production of teaching materials or the provision of audiovisual equipment.

The examples of activities given below do not always fall neatly into one or other of these two general areas but may involve elements of coordination and of support.

Identifying the needs for continuing education

An essential function of a system is to identify the needs for continuing education. This subject has already been covered in Chapters 2 and 3. Analysis of needs is clearly a very appropriate function for the system, as the separate individual groups involved in continuing education are unlikely to have the resources or the influence to identify needs in anything more than a cursory and piecemeal fashion. The consequences of not identifying needs are that unnecessary and unwanted (and therefore wasteful and expensive) education is likely to be offered, that the education will be geared to only certain categories of health workers, or that education is not offered where it is most needed.

Identifying existing activities in continuing education

Continuing education for health personnel is taking place in every country, whether there is a developed system or not. An essential task in the development of a system is to identify all existing pro-

visions for continuing education. This will involve contacting the various organizations that may be involved:

- the Ministry of Health and other ministries, e.g., education;
- the training institutions;
- the service institutions (regional health offices and hospitals);
- the professional organizations (e.g., the medical associations, nursing associations, the association of sanitary engineers, the association of medical assistants);
- the aid and development agencies;
- the media and professional journals;
- the pharmaceutical industry;
- the voluntary organizations such as the Red Cross.

Surveys of health personnel will also determine the most frequently used sources of continuing education.

The identification of existing activities is essential if the system is to avoid unnecessary duplication of effort or the possible omission of agencies or programmes that should have been involved.

Coordinating existing educational activities

The existence of a system does not imply that the educational work of other agencies is unnecessary. This is because the need for education is almost always greater than the availability. However, where different organizations work entirely independently, there will probably be areas of overlap, serious gaps, and potential for conflict. Thus the system should help the various independent agencies to identify activities that are consistent with the overall national policy and should stimulate joint activities. The coordination should involve other sectors—for example, the health services, the education system, and professional organizations of health workers.

However, there is a distinct danger that a system that is too centralized or bureaucratic can damage local initiative and destroy existing patterns of communication between agencies. Coordination should therefore be conducted with sensitivity and respect for existing initiatives.

Providing financial support

In a number of countries, funds are available to buy medical equipment yet there is no budget for continuing education. Therefore the continuing education system must obtain some financial support for its own internal activities. It is more likely to achieve good coordination when it can provide grants to participating

organizations or meet the costs incurred when individual health personnel take part in continuing education.

Providing central facilities and educational advice

The various independent organizations, such as professional associations, may be eager to provide continuing education but lack the facilities. For example, they may require suitable rooms for meetings, or projectors for films or slides. Duplicating equipment is often essential in providing educational materials. Games and simulation exercises can improve the quality of education. A video recorder and television camera can be of enormous benefit in, for example, providing feedback to learners about the quality of their performance of a particular task.

These facilities would probably be under-used if they were owned by a single agency, but when they are owned by the continuing education system they may be lent (or hired) to participating agencies and so achieve maximum usage. This policy will not succeed unless the equipment and rooms are well maintained and efficient arrangements made for reserving them.

The availability of professional educationalists may be of even greater potential benefit. Normally those involved in providing continuing education are not specialists in this field. Professors may have been appointed on the basis of their knowledge of a particular aspect of medicine or because of their skill as research workers; their skill as a teacher or their knowledge of the needs for continuing education cannot be guaranteed. Even the most knowledgeable and expert health worker is likely to benefit from advice on educational matters.

Defining curricula

Where continuing education is being carried out by other agencies, the system can contribute to the quality of the education and can exert some control over it by defining the curricula. This is done through a process of consultation with the various educational agencies and the potential learners. The system can also provide information about current activities both in the country and elsewhere and can bring its professional expertise to bear on the writing of curricula.

Providing courses for health staff

Providing courses for health staff may not be the principal function of a system of continuing education, since various agencies (training schools, professional associations, etc.) may be in a better position to provide such courses. However, the system is the unifying body,

the only one that can coordinate these various courses and other activities. While providing courses may be a legitimate function of the system, it should not neglect its more essential coordinating and supporting roles.

Providing educational materials

Continuing education should never be based only on a teacher instructing a learner. In many situations the learner can use printed materials—journals, self-assessment exercises, manuals, and so on. Even in the classroom, students can learn effectively from specific exercises, educational games, and films.

Many teachers take part in continuing education on only a part-time basis, and it is unrealistic to expect them to spend a lot of time preparing their own materials. Thus the system can develop educational materials for teachers and learners independently, by adapting materials from other countries, improving materials already in use, or designing original materials for specific purposes. However, the materials must be readily available at all times to both teachers and learners, and this will call for an effective publicity and distribution system.

Manuals are especially important. In many countries manuals on procedures for care and standards of performance are prepared to act as textbooks for initial training or as tools to assist health workers in the field—a clear example of continuing education. Manuals can also form an important resource in continuing education courses. Any continuing education organization should, therefore, be aware of all the manuals in current use. The system may also play a major role in the writing and distribution of manuals and in keeping them up to date.

If this substantial responsibility is beyond the scope of the system, it should at least attempt to coordinate the production of manuals by other groups and check their quality. This is important since far too frequently manuals are written in a way that is unsuitable for the health workers concerned, provide inappropriate advice on health care techniques, and are poorly organized for the retrieval of information. They may also give information that is irrelevant or far too detailed.

Coordinating the assessment of health staff

In a number of countries there are systems for assessment of health personnel at regular intervals throughout their professional careers. The arguments for and against this approach are not discussed here. But assessment of this kind does have clear implications for continuing education, and that being so, the continuing education system might be the appropriate body to coordinate and possibly conduct the assessment procedures.

Liaising with supervisors of health staff

Even where there is no formal assessment of performance, supervision is clearly one of the processes that help health workers to learn and must therefore be considered a part of continuing education.

Some possible tasks for the continuing education system are therefore:

- To liaise with supervisors to establish the needs for continuing education.

- To develop checklists and other tools, in collaboration with supervisors, to assist in the process of supervision.

- To help supervisors develop their educational and assessment skills.

- To ensure that supervisors follow up participants in continuing education activities and so help the health workers to apply in the field what they have learnt.

Evaluating continuing education activities and research

The system should accept responsibility for the evaluation of the continuing education activities. This will involve collecting data with a view to answering two questions:

- How effective is the current provision of continuing education—has it achieved its objectives in improving health care?

- How can continuing education be made more acceptable, effective, and efficient?

Evaluation is an essential component of any management system. The system has a responsibility to monitor the effectiveness of its work and that of its collaborating agencies in the area of continuing education. It is also responsible for accounting to the funding agencies for the benefits obtained from the expenditure of resources. Details on scope and methods of evaluation are given in Chapter 9.

At a rather more complex level, through the system it may also be possible to conduct research into the way in which adult health workers learn, a field of research with considerable scope.

Training teachers

As the system is in a central position, one of its functions should be to coordinate, and play an active role in, the training of teachers.

Individual meetings or courses for teacher training can take a variety of forms. They might be a series of seminars on specific techniques, such as the use of self-assessment exercises. Meetings can be arranged where those who are already involved in continuing education can share experiences and expertise. Intersectoral meetings could take place with, for example, teachers involved in agricultural extension work or adult education, where techniques that have proved successful in similar contexts could be discussed. Supervisors of health staff might also be included in such meetings so that they can be helped to appreciate that supervision is ideally an educational process and to acquire the necessary educational skills.

The main aim of these courses must be to extend the range of methods used in continuing education beyond the traditional formal lectures.

Providing feedback to initial training courses

As a result of identifying the needs for continuing education, and through its collaboration with professional bodies and educational or service agencies, the system of continuing education is likely to be in a unique position to judge the effectiveness of the initial training of health care personnel.

The relevant information on areas where initial training is over-detailed, insufficient or inappropriate can be fed back to the institutions providing the initial training. It is unlikely that the system would, or should, have the authority to impose changes on the curricula of these institutions, but such information will enable the institutions themselves to make curricular developments consistent with the service needs of the country.

Coordinating attendance at continuing education courses

It can often happen that a continuing education activity is provided by one agency while permission for health workers to take part in that activity can be obtained only from another agency (or a different part of the same agency). So it might happen that a course would be provided but the intended participants could not attend. Clearly it would be useful if a system of continuing education could co-ordinate the publicity for courses, the selection of participants, and the release of the participants from other duties.

Coordination might go even further, with the system of continuing education arranging with the immediate employers to ensure payment of travelling expenses. Another aspect of coordination might include keeping records of people who have taken part in continuing education activities.

Liaising with health service managers

A health worker may develop new skills as a result of continuing education, only to find that on return to the field the superior officer discourages the application of these new skills. There is therefore a clear need for the system of continuing education to liaise with health service managers to ensure that what is taught is consistent with health service policy and is acceptable in the local situation. This may involve persuading local managers of the benefits of their staff using new skills.

Promoting the value of continuing education

No system can be responsible for all the continuing education that is desirable within a country or region. Thus, one of the system's principal functions must be to stimulate awareness among relevant agencies so that they will all play their part.

The awareness should be created both in organizations and in individuals. The emphasis on individuals is important, since ultimately it is the health personnel and the people they serve who will benefit from continuing education.

The phrase 'a programme of continuing education' can mean either a plan for a series of educational activities or the activities themselves. In this chapter we refer solely to the plan.

The programme should include statements about the goals it intends to achieve, the way in which the goals will be achieved (i.e., the sequence of events to be followed, such as workshops and courses), and an indication of the resources and time required to achieve them.

Sometimes the programme will be concerned with a single educational event, but more commonly a series of events or activities will be involved. Similarly the continuing education system may have only one programme, but it is much more likely that the system will be involved in several programmes that are implemented simultaneously.

Initial considerations

When designing a programme of continuing education there are a number of general factors to be taken into account before the programme can be prepared in any detail. These factors include the national and regional policy, the available resources, the needs for continuing education, the current activities in continuing education, and the current activities in the health sector.

National and regional policy

Any available policy documents should be reviewed to identify the directions, goals, and resources for continuing education. Clearly, the programme should be consistent with the policy and should respond to the priorities expressed in it.

Available resources

The resources, especially human and financial, that could be allocated to the programme should be considered at a very early stage. This will determine the scale of the programme. Other less easily defined resources should also be considered. These include the transport and communication system of the country or region, the buildings and premises available, the resources existing within the

health service for field work and for support of the trainees, and the technical educational support services, such as printing and reprographic facilities.

All these factors will help to determine what kind of programme can be successfully implemented.

Needs for continuing education

Chapter 3 stressed the importance of, and gave techniques for, identifying the needs for continuing education. These needs should have been considered in the formulation of the policy document. They are also of vital importance in designing programmes, because the whole purpose of a continuing education programme is to satisfy them. The identified needs should be expressed in terms of the category and number of health care personnel who would benefit and the skills, knowledge, and attitudes they can develop through continuing education.

Current activities in continuing education

The provision of continuing education throughout the country or region should be reviewed in order to avoid conflicts with similar programmes, to adopt programmes that complement each other, and to reduce duplication of effort.

Current activities in the health sector

Consideration must be given to activities that are going on in the health sector other than those relating to continuing education. For example, the administrative requirements to produce budgets or annual financial returns may take precedence over the need to take part in continuing education. Or there may be priority national programmes of immunization or the control of epidemics that also take precedence. Factors such as these will clearly influence the timing of continuing education programmes.

Designing the programme

With the above general considerations in mind, the programme can now be designed in detail. Most programmes will include a description of the programme goals, the learning objectives, the educational strategy, the timing of activities, the provision of follow-up support, the resources required, and the budget.

The programme goals

The programme goals are a statement of the desired outcomes of the programme. The goals will commonly describe the number of people who will be trained, the nature of the training and the work the trainees will be able to do at the end of the training. Usually the goals will also indicate the changes in the provision of health care that will result from the training programme.

So a set of programme goals might be to improve the quality of management in health centres by providing a four-week course in management for each of the 300 medical officers in charge of health centres. The improved management will lead to a more effective utilization of health staff and their resources in the health centres, increased participation by local health committees in planning health care, and more effective reporting and utilization of health data.

Naturally any programme goals should be derived from, and respond to, the analysis of needs as described in Chapter 3. In turn the goals will determine the educational objectives of the programme, which in turn determine the type of training provided.

One aspect of the goals that merits further explanation is the number and category of people involved. The needs analysis will identify where the provision of health services can be improved, and normally it will be obvious which categories of workers require additional training. However, it may be worth considering how many people should be trained. Should everyone within a category be trained, and if so can this be organized? Is it better to train a complete team or just one category of worker? Are there sufficient resources for training a large number of health workers? Does every health assistant need training?

On the other hand, if only a proportion of a category or a team are to be trained, will the training have sufficient impact throughout the country? Will it be necessary to train a group of health workers from one place so that they can support each other?

The learning objectives

A learning objective is a statement of what the learner will be able to do at the end of the programme. Two examples are as follows.

1. At the end of the session the learner will be able to decide whether to prescribe an antibiotic and to select the most appropriate of eight available antibiotics for each patient attending a health centre.
2. At the end of the session the learner will be able to explain to pregnant mothers the advantages of breast-feeding.

All the learning objectives should:

Be derived from an analysis of needs.

Contribute to the goals of the programme.

Be specific—for example 'the learner should know about malaria' is a useless objective because it does not indicate which aspects of malaria are important.

Be relevant to the job of the health worker.

Be observable—that is to say, the organizer should be able to test whether the participants have achieved the objective.

A well stated objective will usually make clear how it could be observed. For example, a health worker could be observed in a health centre to see whether the antibiotics were selected appropriately. On the other hand, it would be impossible to observe satisfactorily whether a health worker 'knows about malaria'.

However, the situation is slightly different when dealing with attitudes. Most people would agree that attitudes are very important in health care, and that it is legitimate to try to bring about changes in a health worker's attitudes by continuing education. But it is always very difficult to specify attitudes or observe attitude change precisely. Therefore, while objectives should in general be as specific and as observable as possible, it may be necessary, where attitudes are concerned, to accept objectives that are less precise or observable.

Learning objectives serve a number of purposes:

They make clear to teachers and learners what is to be achieved in each learning event.

They provide a baseline to define how learners' changes in performance should be assessed.

They provide a basis for a part of the evaluation.

They give a clear sense of direction to the educational process and indicate possible teaching methods.

Educational strategy

The educational strategy should state how the learning objectives and programme goals are to be achieved. Different types of learning objectives (i.e., concerning attitudes, manual skills or communication skills) will require different types of teaching or learning materials.

The educational strategy must also take into account the numbers of learners and various logistical factors. For a small group of health workers all located near to each other, a workshop or seminar may be appropriate. For literate but widely scattered health workers some form of written material could be sent by post. But

if the workers are not literate or if postal services are very unreliable another strategy is needed.

If the amount to be learnt is large or requires a changed orientation or attitude to health care, a series of educational activities spread over a number of years may be needed.

Timing of activities

Proposed times for activities must take into account the other activities in continuing education and in the health sector generally so that conflicts of priorities do not occur. There is, for instance, no point in arranging a workshop at a time when some urgent national programme will prevent the health workers taking part. The plan must also allow sufficient time for the production of educational materials and to make arrangements for the use of field resources.

Finally the programme may involve a coordinated series of educational activities so that any one health worker may take part in several. It will be important in this situation to make sure that each activity builds on the learning achieved in earlier activities and leads towards the achievement of the final competence required.

Follow-up support

It is a false economy to select only one health worker from a particular location or category to attend a course of continuing education. It is unlikely that one person will be able to exert sufficient influence on colleagues to be permitted to put any new competence into practice. It is even less likely that the person will be able to persuade colleagues to learn from him or her, or to adopt new practices. Depending on the size of their home base and their seniority, two or more health workers of comparable category and from the same location should be trained together. This has the added advantage of providing mutual support and the opportunity to share experiences.

It is one thing to become enthusiastic and competent in a setting explicitly designed to support learning; it is quite another to return to a less sympathetic environment at the home base. This consideration and the need to reinforce what has been learnt make it highly desirable that all plans for continuing education should contain activities for follow-up and reinforcement.

Follow-up support must be taken into account from the very beginning, when the work study is being carried out on which the learning objectives are based. The work study, which shows the areas of work that are poorly performed, is often carried out primarily by educationists, but it is extremely useful if the supervisors or health system managers are involved as well. Where supervisors

and managers are involved the course is made more relevant and the supervisors and managers are in a stronger position to help the learner to apply what has been learnt. It is this support from the supervisors and managers that is of the greatest benefit.

Resources required

Once a fairly clear outline of the overall plan has emerged, it becomes possible to consider the resources that will be needed. These will include:

Teachers or trainers, technical support staff, patients, and members of the community.

Educational and other equipment and materials.

Training locations.

Transport, accommodation, and catering facilities.

A timetable.

Administrative support staff and facilities.

It would be wise to list, for each of the above, what is reckoned to be necessary and, in parallel, what is known to be available. This will help in deciding what has to be found or created and what costs will be involved for each educational activity. This will enable budget estimates to be made and the necessary support to be secured on time.

Teachers or trainers, technical support staff, patients, and members of the community

How many will be needed, with what characteristics, at what time, for how long, and where?

Educational and other equipment and materials

What type and quantity of equipment and materials will be required? What has to be obtained from elsewhere and what has to be adapted or created?

Training locations

Where should the teaching take place in terms of the environment most suitable for imparting the knowledge that is to be transmitted and in view of the number of participants?

Transport, accommodation, and catering facilities

What kind and quantity of transport and accommodation will be needed? What arrangements and facilities will be necessary for catering?

Timetable

What is the overall time needed for the planning, organization, and implementation of the plan and its various components?

Administrative support staff and facilities

What type and number of support staff will be needed and at what stages of planning, organizing, and implementing? What other support facilities will be needed, at what stages, and for how long?

Budget

If every resource is listed, as recommended in the previous section, an estimate of cost can be obtained. Where health workers have to be replaced while attending courses, the cost of replacing them will have to be met by the national or regional funding authority. Such funds may be paid direct to the health worker's employing authority (hospital, health centre, etc.) or they may be paid indirectly to the continuing education system and from there to the health worker's employing authority.

When a number of programmes have been planned, it is possible that the total cost of the programmes in terms of money and other resources will exceed what is available. At this point the priorities of the overall system of continuing education should again be reviewed in order to decide what alterations could be introduced to balance the budget.

Revision and coordination

As a result of reconsidering the priorities and resources available, some programmes will be abandoned and some postponed. Others will be revised. This revision may take the form of adapting the programme so that it will be more economical (for example, by reducing the number of health workers involved or by using cheaper educational methods). Other types of revision will involve rescheduling the programme so that expenditure is delayed.

These revised programmes are eventually combined into an overall plan for the continuing education system, which serves two purposes.

Firstly, it provides an overview of all the activities taking place in the continuing education system, and this makes it easier to assess the total likely impact, the balance between the different types of activities, and the areas where insufficient effort is being made.

Secondly, the overall plan enables the administrator to identify areas in which there is a conflict of interest—one facility being used for two different purposes at the same time, for instance, or one member of staff having insufficient time to prepare for one activity because of other commitments.

Ideally, the whole range of activities should be displayed on a flow chart so that incongruities can be readily identified.

Consultation

One of the most important responsibilities of the organizing body is to ensure that all authorities, agencies, associations, institutions, and individuals are given every opportunity to be involved in decision-making. This process of consultation and provision of information can be very time consuming, but it is essential if a truly coordinated programme is to result—one that is acceptable, effective, and efficient.

ORGANIZATIONAL STRUCTURES

This chapter explains what an organizational structure is, illustrates its usefulness in the context of a system of continuing education, and recommends ways in which it can be built up.

Earlier in the book a 'system' was defined as a set of interrelated parts that work together to achieve a particular purpose. An organizational structure ensures that these 'interrelated parts' do indeed 'work together' as a system.

An organizational structure is a functional arrangement of resources (agencies, institutions, premises, materials, people, etc.) for the implementation of policies and programmes—in this instance, a programme of continuing education. The organizational structure coordinates the work to be done by the various agencies, institutions, and individuals to ensure the optimum use of human, technical, and financial resources.

The functioning of an organizational structure can be seen from two points of view: as a problem of design and structure and as a human process at work. The latter will be discussed in Chapter 8, on implementation. The purpose of this separation of functions is to show how an organizational structure depends on its functions and must be set up according to those functions. All too often the organizational structure is constructed first, before functions are defined and assigned. This tends to lead to the establishment of large, superfluous, unmanageable, and irrelevant structures that consume a large proportion of the available resources. However, when an organizational structure is set up, based on defined functions, a greater proportion of resources becomes available to the actual programmes of continuing education. An unnecessarily complex bureaucratic organization constrains rather than facilitates the implementation of programmes. The structure should remain streamlined to encourage local initiative, ease of communication, and rapid action.

The organizational structure of a system of continuing education should determine levels of responsibility and authority, channels of communication, and patterns of accountability. The aim is to bring about mutual understanding of what each person can and cannot do. This should not lead to the establishment of a rigid hierarchical bureaucracy. Modern organizations tend to be democratic and flexible, to allow a great deal of latitude for informal dialogue, to encourage horizontal communication, and to stimulate the active involvement of all participating agencies, individuals, and groups. This can be fostered through task forces, working parties, and committees with representation of relevant sections, disciplines, groups and agencies.

Modern managers tend to rely primarily on their ability to lead, encourage, persuade, and support rather than on their power to reward and punish. They find it more useful to work with participating agencies through coordination and negotiation than through coercion. Obtaining agreement on how the work is to be distributed within and among the different agencies is crucial for the smooth running of a system of continuing education. Unless the limits of authority of each institution and individual are clearly stipulated and unless the relationships between them are clearly understood, the institutions and individuals concerned will find themselves working at cross-purposes, duplicating effort, and eventually making conflicting decisions in matters such as fund raising, manpower and budget management, and the requisitioning of supplies or equipment. In many situations staff members do not understand what is expected of them and how this relates to the roles of other members of the team and to the total objectives of the system. Individuals will then do what they feel is best, or what they think their supervisor wants them to do, or nothing.

Why the system needs an organizational structure

The activities of a system of continuing education generally surpass in complexity and diversity the managerial capacity of any one participating institution. Consequently, participating institutions will have to share the managerial workload. Equitable sharing of the tasks calls for agreement on the tasks and their allocation. Similarly, collaborating agencies and institutions need to know who will assume responsibility for the operation of the system and the different activities. These negotiations can be conducted only within an agreed organizational structure.

Each participating institution has its own policy with regard to continuing education. Each also has its own organizational structure, programmes, and constraints. However, when they have agreed to joint action and shared resources they will need to reconcile their respective individual policies and reach consensus on the type of structure and the procedures required for the operation of the system. In other words, decisions must be made on who will be responsible for the programme as a whole and for each of its components, as well as on the procedures to be adopted for the management of the system, and, therefore, on the design of the administrative apparatus. Both the form and the management of the organizational structure should facilitate collaboration through the active involvement of all concerned and through ready access to pertinent information.

Decisions on the structure of the system and on the way it is to be governed must take fully into account the fact that the system depends heavily on the cooperation of its participants. Cooperation implies the active involvement of all participants and equal and timely access to information.

The functions of an organizational structure

This section will identify the major principles of organization and its functional elements. While the same principles can be applied to any organization irrespective of its size and the nature of its tasks, it will be helpful to consider briefly the different types of organization a country may need for its system of continuing education.

Types of organizational structure

A large country may see the need for a 'cascade' approach. In this, the national organization would be concerned with the overall coordination of the following work.

Identifying national needs for continuing education.

Planning and implementing national programmes of continuing education.

Allocating resources (mainly financial).

Advising on the planning, implementation, and evaluation of programmes of continuing education and on methods of teaching and assessing the performance of teachers.

The national organization might also be concerned with the organization or provision of information centres and libraries and the production and distribution of educational materials.

The cascade approach implies that each region of a country would have a local organization that would rely on the national organization for central coordination and the provision of centrally available resources and expertise. With the exercise of considerable local autonomy, the regional organization would concentrate on translating national needs and plans into local programmes. In addition, the regional organization would be responsible for very similar tasks to those undertaken by the national organization, but at a regional level.

If the region is so compact that a subregional organization is unnecessary, the regional organization would also act in an executive capacity. This might also be the best arrangement in a smaller country that needs no regional centres, in which case the national organization would undertake the executive responsibilities of co-ordinating the planning, implementation, and evaluation of actual programmes of continuing education.

The term 'cascade' refers to the nature of the responsibilities of organizations at the national, regional, and subregional levels. Each has comparable functions, but the emphasis changes from global tasks to progressively more local tasks, from general coordination of policy and plans to more specific coordination and actual executive involvement in the implementation of programmes.

Thus the national organization has heavy responsibility for co-ordinating resources, policies, and plans but little responsibility for carrying out programmes. The regional centres have a lesser coordinating function but a correspondingly greater role in the execution of programmes. The subregional centres concentrate their main effort on execution and play a minor part in coordination.

In a smaller country, where there is only one multipurpose centre, the responsibilities for the coordination of programmes and for their execution are equal.

The next paragraphs will list a number of functions that are common to all these types of organization. Each function should be adapted to the characteristics of the country or region, in terms of the prevailing administrative pattern, degree of centralization of functions, availability of institutions to which part of the work might be commissioned or delegated, and the nature of the tasks to be carried out. There are two main kinds of function:

- ongoing functions related to the internal operation of the system; and
- functions related to the actual delivery of programmes of continuing education.

Ongoing operational functions

Functions related to the internal operation of the system consist of activities that support the delivery of the continuing education programme and without which the proposed programme is not properly implemented. They are the activities that activate and maintain the system by ensuring that work is properly allocated, the right people recruited, and the tasks carried out effectively and efficiently. The following sections describe these activities in greater detail.

Preparation of work schedules

The operation of a system of continuing education involves the precise identification of activities and tasks and the selection of approaches, methods, and procedures to implement them. The outcome should be a detailed plan of activities. This is subsequently broken down into a timetable for each month, week, and day, and the assignment of the activities to appropriate personnel.

Methods and procedures

To support the above activities, it will be necessary to establish procedures related to reporting, audit, accounting, purchasing, and personnel administration. All the procedures must relate directly to

the functions to be performed and the interrelationships between these functions and the people performing them. Unless they are efficiently designed, clearly outlined, and understood by all concerned, they may become mere 'red tape'. The only justification for procedures is that they should facilitate the process of getting things done.

At a different level, teachers in continuing education programmes will need to know what teaching methods are to be used. Thus methods and procedures need to be identified, agreed on, and used for each major activity throughout the system of continuing education.

Staffing

Staffing is usually achieved by following a number of logical steps.

Determine the jobs needed to carry out the activities.

Prepare each job description, stipulating the duties and responsibilities required by the job (job title, tasks, conditions of work, and nature of supervision).

Prepare the job specification, outlining the attributes and competences required to perform the work, in terms of personality characteristics, academic background, and experience.

Create the post.

Select the most suitable applicant.

The terms of reference of the job may have to be adapted to some extent to the available competences in countries with a severe shortage of qualified personnel.

Transport

Participants in remote areas are likely to require transport to the place where the teaching is being conducted. This is one example of the constraints to be considered when planning, budgeting, and implementing programmes.

Space

Space will be needed for administrative work, for the production and storage of educational materials, and for educational activities.

It is all too easy to think that expensive buildings are necessary for a system of continuing education, but existing training institutions may well have suitable teaching space available at certain times of the year, or it may be possible to rent or borrow suitable premises.

When programmes of continuing education are planned away from central training institutions, it may be possible to use rooms in the local health centre.

Functions related to the delivery of continuing education programmes

The second set of functions of a system of continuing education relates to the actual delivery of the programmes. These activities have been described in Chapter 5, except for the selection of learners, which is described below.

Selecting learners

Selection of the learners for continuing education raises serious questions about the objectives and philosophy of the programme. One approach is for a central organization to identify the skills that need to be learnt and then identify the types of worker in need of training—an approach that has the merit of identifying the key areas for learning and ensuring that those most in need of the further education actually receive it. But the selected personnel may well be poorly motivated and may feel that the education offered is not appropriate to their needs.

An alternative approach is to allow health personnel to decide for themselves whether they wish to participate. However, those who are least competent may not recognize their deficiencies, or they may not care enough to want to improve their skills. Frequently those who are most eager to improve are already competent. Another disadvantage of self-selection is that education about, for example, new drugs or the treatment of rare diseases is likely to be more popular than that relating to disease prevention, health promotion, or health service management. The main advantage is that participants who elect to take a course are usually well motivated and more likely to benefit from the learning experience.

A compromise should be reached by involving potential learners in deciding what is to be learnt and who will take part. The continuing education system should ensure that:

The learning experience is relevant to societal, organizational, and individual learning needs.

Learning opportunities are made available to all the relevant health personnel.

Learning opportunities are accepted.

What is learnt actually results in improved performance.

Setting up the organizational structure

Once the functions of the continuing education system have been identified, they should be assigned to individuals or committees, and the relationship between these groups and their areas of control defined.

Each system of continuing education will have its own sets of functions, therefore it is not feasible to prescribe a common organizational structure that is universally applicable. However, the following model would be useful in many circumstances. The model has four main levels of responsibility—a policy-making network, an executive secretariat, a technical group, and an operational group.

Policy-making network

The policy-making network is made up of representatives of organizations, agencies, and institutions and is responsible for formulating a policy for the system of continuing education and contributing to the desired pattern of organization.

Executive secretariat

The executive secretariat is the permanent operational arm of the system of continuing education. Its functions include the daily operational aspects carried out at headquarters and/or at regional and local levels.

Technical group

The technical secretariat is responsible for most, if not all, of the ongoing operational functions described in the previous section. The responsibility for these activities is likely to be delegated to committees, task forces, working parties, or similar groups.

Operational group

The operational group is responsible for the delivery of the continuing education programmes. It is the teaching/learning 'front-line' of the system and is made up of teachers, facilitators, and participants. There may be as many operational groups as necessary for the implementation of the different learning events throughout the country.

Styles of organizational structure

Centralization versus decentralization

An important consideration is the degree of centralization of the system. This refers to the concentration of decision-making power in the organization's governing body and the amount of delegation of power to regional and local levels. There is no universal prescription in this respect, since defining the span of control at each level of operation depends on the specific context and therefore needs to be resolved on a case-by-case basis. However, the following issues are suggested for consideration:

Size of the programme.

Strength of the infrastructure at the subnational and local levels.

Scope of activities (occupational target groups, range of methods used, level of penetration, etc.).

Type and distribution of expertise available.

Communication and transport facilities.

There is always a danger that the system will become so centralized and bureaucratic that it will discourage local initiative and destroy existing patterns of communication between agencies. Consequently the coordination of activities and delegation of responsibility should always be carried out with respect for the competence of the intermediate and local levels. Wherever possible, local levels should be allowed to decide what is most appropriate for their needs.

Open systems

Group interaction calls for a great deal of interagency consultation—i.e., the process of seeking the views and feelings of participants in the system of continuing education as a basis for reconciling policies and making decisions. It is imperative to take account of the policies and views of participating entities, because this prevents conflicts, encourages effective participation, improves the quality of decisions, and leads to better interagency relationships.

A system of continuing education should by preference be organized as an open system—as a part of the society in which it operates, influenced by, and responsive to, changes in socioeconomic and political factors, rather than as a rigid structure based on the simple but inadequate concept of a single cause leading to a single effect. The notion of an open system favours a more realistic perception of problems and situations related to the operation of a system of continuing education and to a more functional deployment of the resources needed for its implementation.

Network concept

A national system of continuing education should be conceived as a network, such as those promoted by WHO to encourage an intersectoral approach to health development and the active participation, cooperation, and resource sharing of all involved.

A 'network' implies people talking to each other and sharing ideas, information, and resources. The important consideration is not the organization *per se* but the way in which individuals and organizations get together and the consequent increase in communication and interinstitutional linkages and the enrichment and strengthening of each participating unit.

Network development requires a very flexible organization, in terms of both membership and scope. A network is not seen as a monolithic organization of aggregate entities, highly centralized and governed by a rigid authority. It is seen as a deliberate, purposeful coalition of individuals, programmes, institutions, and associations concerned with different aspects of continuing education. The network allows for expansion of membership and scope, and major decisions grow out of consensus and are subject to change. Networks change over time because they reflect the fluctuating organizational needs and interests of their membership.

This type of organization is thus dynamic, always ready for transformation, and in a constant state of flux. Networks adapt more readily to the varying characteristics of different tasks than do traditional hierarchical organizations.

In a network, each participating individual, programme, institution, and association has something to contribute (technical know-how, political support, premises, equipment, money, etc.), and leadership can be transferred naturally from one institution to another depending on current needs. Activities such as teacher training, development of learning material, and programme development can each be undertaken by a different centre.

By definition, networks are cooperative, self-generating, self-organizing, and non-competitive. The participating agencies are united in a common goal.

Implementation is the process of putting policies, programmes, and plans into effect. The aim of implementation is to achieve specified programme targets, according to proposed methods and a proposed timetable, within the limitations of the available resources.

Who takes part in implementation?

Several categories of people are involved in implementation: the coordinator of the overall system of continuing education, those responsible for programme activities in the different echelons of the system, the supervisors and educators, and a broad range of operators, from those responsible for the execution of specific activities to the unskilled workers providing logistic support.

Participants in the learning opportunities offered by the system are also involved in the implementation process, because it is their needs that determine much of the content of the learning experiences.

The involvement of the community is similarly important, since its health needs form the basis for many of the continuing education programmes. However, the level and mode of participation depend on the local situation and will be determined accordingly.

Core group

Because so many organizations and individuals are involved, it may be useful to establish a core group of individuals with managerial, teaching, and substantive (e.g., clinical, or environmental health) skills to undertake the responsibility for implementing the programme. The roles of core group members include:

- work design and planning of activities;
- coordination of activities;
- teacher training;
- preparation of learning material;
- selection of learners;
- budget execution and accounting procedures;

- purchase of equipment and materials;
- recruitment of support staff;
- maintenance and operation of equipment;
- communication and reporting of procedures;
- monitoring and control;
- review;
- provision of logistic support (transport, premises, etc.).

The size of the core group depends on the scale of operations and the scope of the programme. Members could be either full-time or part-time, contracted specifically for the programme or co-opted from the participating institutions.

So many organizations could be eligible to take part in the active direction of the programme that it might be impossible to include them all. The problem is then how to select the right individuals and institutions. The wisest course is probably to include the strongest institutions rather than the weaker ones, the problems of which would tend to overwhelm the system from the start. The strongest institutions are, of course, already extremely busy and will have to be persuaded to take the lead in developing the abilities of other institutions and groups to play an active part.

One of the responsibilities that may be assigned to the core group is coordination. When independent institutions join in a common effort, there are inevitably gaps, areas of overlap, and sometimes conflict, and the core group will be called on to reconcile these difficulties. Communication and the exchange of information are essential for effective coordination.

Coordination involves all relevant agencies—that is, ministries of health and education, training institutions, professional associations, scientific societies, and the pharmaceutical industry. Each has different resources to contribute—funds, staff, political support, equipment, transport, and so on. Each has different needs and different motives for contributing to the programme. The core group should help them by identifying relevant activities and encouraging cooperative action.

Technical groups

The responsibility for each of the major elements of the programme should preferably be assigned to a particular group with specialized skills from one or more of the participating agencies. This would be done by establishing working groups, task forces, or technical groups. The tasks of such groups include preparation of the curricula for training teachers, the design of learning materials, the evaluation of continuing education programmes, and research.

A technical group need not be permanent and its members need not participate on a permanent basis. Membership may rotate or

may last until the completion of an assignment or may even be regarded as a temporary consultancy.

Guidelines for the implementation of group work

The overall coordinating or directing body will in most cases be a decision-making body. Unless it is decided to designate an executive secretary or director, most decisions will be made by consensus. Although technical groups are primarily advisory bodies, they will also make task-orientated decisions by consensus. It is therefore useful to consider the following ways of facilitating decision-making by executive or technical interagency groups.¹

1. Keep the group up to date on all assignments related to the objectives of the system of continuing education.
2. Select items for the agenda of each meeting that are relevant to the group's terms of reference and within its competence.
3. Introduce the discussion on each agenda item, define the problem, and provide the facts needed for decision.
4. Be well prepared for the meeting and ensure that all the members are prepared as well.
5. Ensure that each group chairman, coordinator, convenor, or facilitator encourages contributions from all participants, controls any tendency for the discussion to deviate from the main issues, assesses the tensions in the meeting and restores the balance where necessary, and is brief in his interventions and flexible in applying rules of procedure.
6. Carry out periodic assessments of the work of the group.
7. Take prompt action on decisions.
8. Inform permanent staff of all developments.

Establishing a group

When it is decided to establish a group, certain steps must be taken. A descriptive title for the group must be chosen and the terms of reference (i.e., the aims and functions) clearly defined. It is then necessary to consider the operational factors—the number of members, the criteria for selection, the period of office, whether there should be *ex-officio* and co-opted members, and whether such members should have the same rights as the rest. Once the charac-

¹ Adapted from: Moores, R. *Notes for managers, No. 9. A practical guide to joint consultation*. London, The Industrial Society, Contemprint Ltd., 1979, pp. 13–16.

ter of the group has been thus outlined, the way is open to determine its actual composition and membership, to designate a chairman and secretary, or convenor or facilitator, and to decide on their terms of reference, duties, and prerogatives. One matter that deserves particular attention is whether members of the group should end their period of office together or in rotation, and it must be decided whether those who retire are eligible for immediate re-election or whether there is to be an enforced rest period.

Finally, the functional arrangements must be laid down—the frequency of meetings, the provisions for extraordinary meetings, the quorum, the working hours, the deadline for the submission of agenda items, the deadline for the circulation of the agenda, the provisions to be made for reporting the proceedings (e.g., group reports, newsletters), and the need for subcommittees.

Desirable characteristics of implementors

Effective implementors must plan, organize, administer, staff, direct, coordinate, report, budget, and control. The implementor is expected to help groups and individuals from the various participating agencies to work together harmoniously and efficiently. Effective implementation can be recognized by the achievements of the team rather than by any particular methods or personal attributes.

The qualities required of implementors are energy and drive, flexibility and ingenuity, organizing ability, ability to motivate, decision-making capacity, and ability to communicate.

Implementors should be carefully selected on the basis of their qualifications and appraised in terms of both training and experience, as well as for their motivation.

The process of implementation

In Chapter 7, the functions of implementation were broken down into those relating to the maintenance and operation of the organizational structure and those relating to the actual delivery of the continuing education programmes. There is a third set of functions common to both aspects of the system. They are managerial in nature, since they relate to ongoing management of the structure and the programmes. They include communication, reporting, monitoring, controlling, purchasing, maintenance, supervising, and reviewing. They are discussed in the following sections.

Communication

Organizations and communities have shown a consistent trend to move progressively from democratic methods based on representation to democratic methods based on direct involvement of the

people. This trend underscores the importance of communication as an essential element of motivation and participation.

In large organizations, and even more so in systems involving several organizations (such as the one described for continuing education), communication is essential to successful management. There must be a free flow of information both to and from the manager. Personnel need to be informed of the activities that influence their daily work environment.

Communication does not simply mean 'telling' or 'writing'; it is rather the transfer of information or ideas from one person to another. It is not effective unless the sender is certain that the recipient has understood the message in the way the sender intended.

During the period when procedures are established and arrangements are being planned, it is important to listen to the ideas and suggestions of all the representatives of institutions and programmes involved in the system of continuing education and of all those who will be affected by the decisions. When the decisions have been made, all who are affected by them must know what the decisions and procedures are. This will involve brief and clear communication.

Reporting

Reports constitute an essential means of communicating information in the monitoring and control of organizational and educational activities. Reports are needed on all aspects of the entire system of continuing education, including finance, personnel management, administration, and technical activities, from the planning stage to the results. Reports should be punctual, brief, and clear, and they should be distributed to all participants who need or want to be informed.

Monitoring and control

These two managerial functions are complementary and essential in the day-to-day operation of a system of continuing education. They involve continuous checking to detect any deviation from what has been programmed, so that early corrective action can be instituted.

Control is based on the formulation of explicit, coherent, and relevant health policies, the precise definition of objectives, realistic programming, a sound organizational structure, adequate training, and the communication of information. Control is achieved through monitoring—that is, checking whether appropriate action has been taken.

In devising control procedures one should select the significant points of each operation and concentrate attention on them—e.g., the number of institutions involved and the types of contribution they make. An attempt must be made to develop measures of success or indirect indicators for each objective and group of

activities—e.g., the analysis of participants in each type of educational event by occupation, type of institution, and geographical area. It is necessary to avoid excessive control procedures; they are expensive and time-consuming and may inhibit initiative. One can never be exhaustive. Monitoring procedures should be chosen that give the information required for decision-making and the reporting system should be developed accordingly. Where possible, performance standards and job descriptions should be established as a basis for measurement, and the usefulness of work studies should be remembered in this connection. Every effort must be made to improve supervisory competence so as to identify defective performance and provide educational support. Good supervision is especially important in major operations, in remote areas, for isolated personnel, and for critical activities.

The monitoring of educational programmes calls for the recording of the activities and the work that is done. This information should be made available through the reporting system set up during the preparation phase. The records made should include information about the courses that have taken place and the people who took part in them, the educational materials that have been produced, the expenditures incurred, and the cooperation achieved. The record of achievements is then compared with the original plan. The programming and work schedules should be consulted and deficiencies noted. Corrective action should be decided on where it is necessary and feasible. It may involve shifting resources (including personnel), altering established practices where these are ineffective, and providing training or more specific supervision for staff who have not achieved their targets. These decisions should be communicated to all the personnel concerned and possibly also to the various cooperating institutions.

Purchasing

Purchasing begins with the ordering of equipment, which may range from office stationery to vehicles and buildings. Purchasing includes renting, hiring, or leasing where appropriate, as well as the negotiation of service contracts to maintain equipment.

Before purchasing any equipment, consideration should be given to its appropriateness and necessity and to the possibility of sharing.

Maintenance

Day-to-day management will involve the maintenance of supplies, equipment, buildings, transport, and staff. A crucial target for maintenance is the stock of supplies and replacement parts for all equipment and machinery. Supplies often take a long time to arrive; it is usually too late to wait until a particular part is needed before placing the order.

When personnel change jobs, retire or resign, they need to be replaced. Often the new recruit may need a period of training and orientation. Early appointment is thus desirable to avoid disruption of work.

It is essential to ensure that staff are satisfied with their duties and with their working environment.

Supervision

Supervisors have the responsibility of overseeing their part of the system and dealing with problems as they arise. Supervisors should refer problems beyond their control to their superiors.

Supervising has been traditionally viewed as 'policing' the activities of personnel—checking that programmes proceed according to plan, that procedures are followed, and that work is of a satisfactory standard. In short, that things do not go wrong.

However, there is a more positive aspect to supervision, namely, the provision of continuing education, guidance, encouragement, and motivation. Supervision should help to develop the quality of work and job satisfaction.

Four activities are involved in supervision. Firstly, it is necessary to find out what work has been done and what methods have been used. This will involve the observation of personnel while they do their work, the inspection of the workplace, and the examination of records kept or of the tangible products of the work. Secondly, the work must be compared with specified targets, norms, or established standards. Feedback to the personnel on the quality of their work (both positive and negative aspects) should include advice on ways in which the work can be improved. Thirdly, action should be taken to reduce the problem of unsatisfactory work, if this is found to be due to factors other than incompetence—for example, if it is due to lack of effective administrative procedures or an unsatisfactory working environment. Work improvement methods, including work study, may prove helpful.¹ Fourthly, agreement must be reached with personnel on targets and on changes in work and deadlines. The essential idea is to achieve agreement rather than impose standards or targets.

Reviewing

The activities of a continuing education system will include projects with a limited timespan and programmes that continue indefinitely. Reviews are appropriate when projects have been completed or when programmes have been in progress for some time. A review

¹ World Health Organization and BLAT Centre for Health and Medical Education. *Work improvement in health services. Workshop on work study for better decisions*. Geneva, 1986.

may also be appropriate when major changes take place within the programme, such as changes in key personnel, collaborating agencies, or financial support. Both the end of a project and the review of a programme present particular problems of implementation.

The overall aim of a review is to learn from experience and to introduce improvements, and to this end it should always contain the elements described below.

Summary of achievement, failures, and costs

This summary should be prepared on the basis of the targets outlined in the plan of the project or on the basis of the goals and policies of the programme as a whole. Consideration should be given to whether the objectives were appropriate and whether the objectives were achieved. Account should be taken of successes, failures, and costs.

Explanation of problems and constraints

Where failures have occurred in the programme, the reasons should be analysed while the experience is still fresh. The aim should not be to make excuses or defend personal competence; rather it should be to identify ways of overcoming similar problems in future projects or in later stages of the programme. Even when targets have been achieved, it may have been possible to have achieved them more quickly or more cheaply. Possible improvements should be analysed and recorded.

Acknowledgement of contributions of others

Inevitably a successful programme will have received considerable assistance from individuals and institutions not directly employed by the continuing education system. These contributions should be recorded and acknowledged in direct communication and in the report on the programme. In this way credit is given where it is due, and future cooperation is fostered.

Reports should be prepared at major review points of a programme and at the end of projects. They will be based largely on the reporting procedures and monitoring system of the operating phase, on the supervision reports, and possibly on the evaluation process discussed in Chapter 9.

This chapter explains how the whole range of activities of a system of continuing education can be evaluated. This means that the effectiveness of each programme and its courses must also be considered. But the evaluation of the system should be much more than that. It should include an overall appraisal of the direction, effectiveness, and efficiency of the whole programme.

This chapter describes some ways in which the work of the continuing education system can be evaluated. Ultimately, expenditure on continuing education can be justified only if it leads to improvements in the coverage, relevance, and quality of health care. Clearly an attempt must be made to measure the influence of continuing education on the way in which health care is provided and on the health status of the community. In practice, this influence is difficult to determine since changes are subject to a variety of factors, such as changes in resource allocation to health care and changing economic and social circumstances. Evaluation should thus take into account very much more than the end products of the continuing education programme. The following sections will explain what can be considered and how the data can be collected.

What is evaluation?

Evaluation is the process of collecting data, presenting them in a convenient form, and using them to form judgements or reach decisions about an educational activity or other type of process.

This is a broad definition, and some authorities concentrate solely on the data-collection stage while others see the judgement and decision-making as the essential feature. While the strict definition of the word is debatable, the practical point is that both data-collection and decision-making must take place. This chapter deals with both aspects.

Evaluation is worthwhile only when appropriate questions are asked, when the data are interpreted without preconceived ideas or prejudices, and when they are analysed in a positive manner. The report should be written with due sensitivity to the emotional commitment of all those involved in the educational activities.

The evaluation reports should help those in charge of the system of continuing education to decide not only what should be changed but also how the changes might be carried out.

Why evaluate?

There are four main reasons for evaluation.

1. To describe what has been done. Obviously, if there is no record of what has been achieved there is no basis for future planning.
2. To improve what is being done. A critical analysis of the continuing education programme will show features that can be improved. The deliberate attempt to identify these features is called formative evaluation.
3. To judge what is being done. When a continuing education programme has been in existence for some time, decisions will have to be made as to whether to continue allocating resources to it, whether to expand it, and so on. These decisions will be based largely on a judgement of the effectiveness of the programme. This judgement is called 'summative evaluation'.
4. To motivate those involved in the programme. Evaluation, in effect, monitors the progress of the programme. As a result, there is increased incentive for those working on the programme to maximize their efforts, since the contribution they make will be noticed.

What should be evaluated?

There are three broad areas to be evaluated: the plan, the process, and the product.

The plan is a statement of the activities in which the system intends to engage, together with statements of how it is intended to carry out these activities. The plan, therefore, includes statements about goals, priorities, and methods.

The process is the way in which the plan is implemented, i.e., what actually happens.

The product is the result or outcome of the process. This includes what has been achieved in general terms (for example, improved cooperation between the Ministry of Health and the educational institutions), as well as specific improvements in the skills of the health personnel and in the provision of health care. A change in the health status of the community attributable to improved performance would also be an ultimate product of the system.

The breadth and depth of evaluation will depend on the purpose—whether it is formative or summational. Therefore, not every aspect of the following section will apply in every evaluation procedure. However, evaluation should be included as an integral activity of the system as a whole and of each of its plans and subplans.

Evaluating the plan

The general approach to evaluating the plan is to inspect all statements about policies, priorities, and intended programmes. These should be summarized to provide a description of the plan. The plan should then be critically analysed. This analysis must inevitably be subjective, since there can be no absolute criteria. However, some of the questions that might be asked in such an analysis are given below. This is by no means a complete list, but it should provide an indication of some of the areas of concern and of the kind of data that will need to be collected from the plans. If the data are not available, this may be an indication that the plan is inadequate. The approach to evaluating the plan is to decide on the questions that need to be answered and to inspect the policy and planning documents to determine the answers. No special methods of data collection or data processing need be used.

General background

1. Are the activities based on a study of the needs for continuing education?
2. Have the health needs been determined on the basis of data from the whole community, or just from hospitals or health centres?
3. Are the policies and activities for continuing education consistent with any national health policy or programme?

Activities selected

1. Are the activities appropriate to the most urgent needs?
2. Are the activities feasible and are the necessary resources and skills available?
3. Has a budget been prepared for each activity? Does the anticipated benefit of the activity justify the costs involved?
4. Will the staff have enough time to complete all the activities within the time allowed?

Educational programmes

1. Are programmes available for all categories of health care staff?
2. How many members of each category of health care workers will be involved in the various programmes? Are these numbers appropriate?

3. Does the programme form part of a comprehensive and long-term scheme of career development?
4. Are the learning objectives for each educational programme stated? Is there a statement of what the health worker will be able to *do* at the end of the programme?
5. If the learners achieve the objectives, will they be able to provide a better quality of health care?
6. Are the objectives consistent with the type of work the learner is expected to carry out?
7. Is there any evidence that the learners have already achieved these objectives through previous training or on-the-job experience?
8. Can the objectives be achieved in the time available?
9. Are the planned teaching methods likely to be effective in achieving the objectives?
10. Is there provision for adapting the programme to meet the needs of individual learners?

Evaluating the process

The process can be thought of in two quite distinct contexts—the process of education, i.e., the teaching methods used; and the process of organization, coordination, and other activities that underlie education. Both these aspects should be evaluated. As the methods used will differ, they will be considered separately.

Process of education

The following types of question should be answered. For each question one method of finding the answer is suggested in parenthesis, but other methods are also possible. Even though certain questions are not easily answered in numerical terms, it does not follow that they should be ignored, because the answers, even if open to debate, can provide guidance on how to improve the quality of the education provided.

1. How many health workers in each group took part? (Inspection of records.)
2. Were the participants the ones who had the greatest need for training? (Review of the selection process.)
3. How many completed the activities satisfactorily? (Inspection of records.)
4. Did the health workers think the teaching was effective? (Opinion questionnaire—possibly interviews with a sample.)

5. Was the atmosphere open, happy, and productive? (Observation or opinion questionnaire.)
6. Were appropriate methods of education used? (Observation using a rating scale or check-list, after first deciding on criteria for appropriate methods.)
7. Were the teachers drawn from a variety of backgrounds—the field, the teaching profession, the civil service—and did they have complementary skills and personalities? (Inspection of the teachers' curricula vitae, plus observation.)

Process of organization and coordination

The other activities of the continuing education system are more difficult to evaluate, since the 'correct' process is even less easy to define. The basic procedure is to list the various activities that are being undertaken and to decide on appropriate questions. This rather vague suggestion can be illustrated by an example. Suppose one of the activities is to 'coordinate the continuing education activities of the various agencies'. Then some of the questions might be as follows.

1. Which agencies have been contacted?
2. In what way has contact been established and maintained (e.g., letter, phone, meetings)?
3. How many contacts have been made with each agency?
4. What relationship exists between the various agencies and the continuing education system?
5. What kind of cooperation and coordination has been sought?
6. How much time has been spent in attempting to coordinate activities?
7. What problems have been met with and how have they been solved?
8. At what level were negotiations conducted and agreements made?

These questions are again difficult to answer because they rarely involve numbers, and the answers are to some extent subjective. This is unavoidable. The nature of the questions points to the evaluation methods to be used. These will mainly consist of structured interviews and possibly direct observation.

Such evaluation should perhaps be seen as a way of helping management to keep objectives in focus and maintain a critical attitude to whatever is done. This will usually be more valuable than attempting to provide a precise numerical account of what has taken place. If this general emphasis is accepted, the lack of

precision and objectivity in data collection is less important than the insights and positive suggestions for improvements that can result from the interviews and observation. This method of evaluation is referred to in the literature as 'illuminative evaluation'.

Evaluating the product

There are two products of a system of continuing education—the intermediate product and the long-term product. The intermediate product can be identified as the competences that health workers acquired from the educational experiences or as the level of cooperation that has been achieved between various institutions. The long-term product can be evaluated in terms of changes in health care delivery and, ultimately, changes in health status.

Evaluating intermediate products

The evaluation of competences acquired as a result of continuing education is astonishingly rare. It is usually assumed that if health workers have been told how to do something they will be able to do it. This is a false assumption. Minimum evaluation should establish which objectives of an educational intervention have been achieved by each of the learners. This should be assessed after each educational activity by performance testing, in which learners should be tested on what they can do rather than on what they know. For example, one should ask whether learners can decide which of a group of patients in a health centre should be referred, rather than whether they can list the criteria for referral. Techniques of performance testing have been well described by Katz & Snow.¹

Other outcomes such as increased cooperation between agencies, development of improved teaching methods, and provision of facilities should also be recorded in whatever way is appropriate. In every form of evaluation the underlying question to be answered is: have the objectives or planned products been achieved?

Evaluating long-term products

So far, the evaluation of outcomes will have shown whether the system and the health workers themselves have the potential to improve the quality of health care. But one of the enduring problems of continuing education is that although skills have been learnt they may not be used in the field. This can happen for various

¹Katz, F. M. & Snow, R. *Assessing health workers' performance*. Geneva, World Health Organization, 1980 (Public Health Papers, No.72), pp. 29–47.

reasons. For example, the field situation may be so different from the learning environment that the skills are more difficult to apply or are even inappropriate. Medical practitioners taught how to take a detailed history may feel that they do not have time to do this when faced with a long queue of patients.

Another reason why skills learnt may not be used is that the health workers may not want to use that particular skill—possibly because it requires too much effort or because it is not acceptable for some cultural, social, or religious reason. An extreme example would be that of health workers taught how to perform abortions but having strong opposing religious beliefs.

It must be borne in mind that learning has not been completed at the end of a learning experience. Learners need a further period of time to digest what they have learnt and they also need the opportunity to apply what they have learnt before such learning becomes a part of their set of competences. It will therefore be more realistic to delay assessment until at least one month after the last educational experience.

There is thus a need to describe what happens in the field as a result of continuing education activities. This description can be based on questionnaires to the health workers, reports from supervisors, or direct observation.

Questionnaires to the health workers are usually the cheapest form of evaluation. They should ask the health workers what skills they actually use and with what frequency. It is not enough to use words like 'occasionally' and 'rarely'; it is much better to use 'about once a week' or 'less than once a month'.

There are serious limitations to the questionnaire because it effectively constitutes a report by the health workers of their own work. This may be inaccurate, and it is difficult to obtain any idea of the quality of the work done. There will also be bias, because some of the health workers will not reply, and those who do will not necessarily be representative of the whole group.

Reports from supervisors offer an attractive method of evaluation for a number of reasons.

The supervisors would be visiting the health workers in any case, so that there should be little additional cost.

It will give added purpose to the supervisor's visit.

Supervisors will be brought into the continuing education system.

For the present purpose the supervisor should be asked to concentrate on the actual techniques and skills that have been taught during the educational activities. But the supervisor may also gain insight into health workers' needs for further continuing education and their feelings about the activities in which they have already participated.

Observation is generally costly and difficult. It is costly because it usually involves travel for a single purpose and will inevitably

take quite a lot of time. It will usually be impossible to survey more than a small sample of health workers. Further, because health workers know they are being observed, they are likely to display atypical patterns of behaviour and performance. It will nevertheless be useful, from time to time, to see what the health workers can do in field situations, not only for evaluation but also to gain direct experience of the realities of working in the field.¹

Changes in health status as well as changes in the provision of health care should be considered. If, for example, the long-term objective of a continuing education programme is to reduce the incidence of malaria or to increase the relevance of referral decisions, these outcomes must be recorded. Naturally, there are difficulties of experimental design, since the incidence of malaria is governed by many more factors than the skills of health workers. Changes in incidence cannot, therefore, be attributed automatically to the continuing education system. However, some attempt should be made to see whether any change has occurred—even though the cause of the change may be uncertain. Evidence of change should be sought from existing data, such as those collected by the Ministry of Health, simply to avoid duplication of effort.

The structure required for evaluation

Evaluation has been described as a 'state of mind' rather than as a precisely structured activity. This is in many ways true, since people who are self-critical and look for ways to improve their work are continually evaluating themselves. This is a state of mind that should be encouraged, and to this extent evaluation pervades all activities.

While the above is true, it is not enough. For the evaluation procedures outlined in the previous sections, time, people, and money must be allocated, since the procedures involve writing questionnaires, meeting supervisors, travelling to make observations, recording and analysing data, and writing reports. The issues are therefore:

Who should do the evaluation?

How will it be organized?

How much will it cost?

Who should carry out the evaluation?

Formative evaluation must be a continuous function of the system itself and must therefore involve planners, implementors, and par-

¹World Health Organization and BLAT Centre for Health and Medical Education. *Work improvement in health services. Workshop on work study for better decisions*. Geneva, 1986.

ticipants. However, from time to time it may be advantageous to involve an external evaluator, who can bring a fresh perspective to bear and may see the interaction of processes, personalities, and circumstances more clearly than those who are intimately involved in the day-to-day activities.

Those who are involved in a specific activity should decide what data should be collected, when they should be collected, and what criteria should be applied to judge these data. They should also decide who should receive the evaluation data and for what purposes. There is little point in collecting data unless they will facilitate decisions.

Summational evaluation should by preference be directed by an external evaluator in order that the resulting report will have the credibility required for its full acceptance by decision-makers. A report that can be suspected of bias or self-interest is unlikely to find full acceptance. The external evaluator will require detailed briefing on the purpose of the evaluation and will have to ensure that those who are involved in the system are also involved in the evaluation.

The relationship between evaluator and those who are evaluated is a delicate one. Ideally it should be a relationship of trust and cooperation. This means that the plan for evaluation should be discussed and agreed by both parties. In addition, the evaluation report itself should ideally be presented as a joint report in which those who are evaluated have the opportunity to comment, explain, and even present alternative data.

How will evaluation be organized?

Because evaluation involves looking at the plan, the process and the product, the organization of evaluation must be part of the whole plan for continuing education. How evaluation is to be carried out must be discussed from the very beginning, and time and personnel must be allocated to the evaluation process.

How much money will be spent on evaluation?

A case has been made that evaluation must be regarded as an integral part of the system of continuing education. It must therefore be allocated an appropriate proportion of the total budget. A figure of 10% would not seem unreasonable and has been applied in a number of instances. The simple point to be made is that it is reasonable to allocate some money to the evaluation process, since it is this process that will help to increase the effectiveness of all the activities in the continuing education system.

ANNEX 1

CONTINUING EDUCATION IN CUBA¹

The organization of continuing education in Cuba began in 1983 with the purpose of improving the scientific and technical competence of health personnel. The aim was to ensure that all professionals and middle-level technicians of the national health system were able to update and improve their knowledge and skills.

To start with, efforts were directed at developing a programme embracing all health professionals and technicians, making use of the organizational structure and resources of the national health system. This programme developed into a subsystem of medical education covering the health personnel at work in health care units at different levels. Plans for continuing education were publicized throughout the system, so that the possibilities of taking part in various events and activities were known to all.

Organizational structure

To achieve the proposed programme objectives and ensure that the subsystem fulfilled its purpose, the National Directorate of Higher Education was established, under the Vice-Minister of Education. This Directorate is responsible for the promotion, planning, organization, direction, and control of all continuing education activities and for the establishment of norms of care and standards of performance within the subsystem as well as for the development of audiovisual materials.

The organizational structure of the subsystem is supplemented by a Department of Continuing Education in each province under the Provincial Public Health Directorate, which is responsible for the planning, implementation, and management of activities at the provincial level. In addition, municipalities and health care units of the organization throughout the provinces have designated continuing education activists who contribute to the implementation of these activities.

The National Information Centre for Medical Science, which is part of the national health system and has a network of libraries

¹This annex is a condensed version of a paper by Dr Fausta Damas-Torres, which was prepared for a meeting on Coordination of Continuing Education Programs and Supervision, convened by the Pan American Health Organization in Washington, DC, USA, 12-16 September 1983.

throughout the country, is the final component of the national subsystem of continuing education. This centre offers regular scientific and technical information to health personnel in the form of journals, pamphlets, and papers on topical questions, in addition to secondary publications, bibliographical searches, and translations of scientific works.

Underlying general principles

The continuing education programme is based on the following general principles.

1. **Universality.** It covers all health personnel, both professional and technical, regardless of their position in the hierarchy of health care levels.
2. **Meeting the needs of both the health workers and the people.** The central objective of the programme is to satisfy the health needs of the people through the provision of improved health care by professionals and technicians; thus the programme contributes simultaneously to the country's scientific development, the job satisfaction of the participants, and the improvement of health services.
3. **Identification of needs and priorities.** The health needs identified and the priorities determined for the drawing up of plans are properly reflected in the aims and approaches of the subsystem.
4. **Consistency.** The continuing education programme operates at the national, provincial, municipal, and institutional levels, and each of these levels determines the content, duration, and frequency of educational events and thus the complexity of the programme.
5. **Sequentiality.** The concept of continuing education is that of a permanent progressive learning process, and health personnel therefore participate in the programme on a regular sequential basis.
6. **Central setting of standards and decentralized implementation.** The programme is conducted in accordance with certain methodological norms and standards that are centrally determined and compulsory throughout the subsystem; they define its scope and constraints and the requirements for accreditation, at the same time regulating the design and implementation of plans. Activities are planned and implemented at all levels of the subsystem.
7. **Supervision.** The implementation of plans at each level of the subsystem is monitored by means of the statistical information that flows through the national health system, and by the ana-

lytical information provided by the continuing education subsystem itself. Permanent supervisory mechanisms have been established at all levels of the subsystem. Reviews are conducted for the purpose of monitoring and guidance, and official guidelines are used to examine the following three fundamental aspects: administrative organization; understanding and compliance with norms and standards; and results of previous supervision. On the occasion of each review visit, any shortcomings are pointed out and relevant conclusions and recommendations made. The recommendations are kept under permanent review in the unit being supervised.

8. Accreditation of participants. Regardless of the hierarchical level of the activities and the way in which the teaching is organized, participants receive a certificate accrediting their attendance at all activities of 20 or more hours' duration.

Programmes

The purpose of the national health system is to work for the progressive improvement of the people's health, and it is of paramount importance that the health professionals and technicians in the system be at all times in a position to contribute to this purpose. The fundamental objective of the subsystem is the development of plans that will truly serve as a tool to improve health services, ensuring that all personnel have the opportunity to develop and improve their competence.

Continuing education activities are defined and classified according to their objectives, the level at which they are to be carried out, their type, and their duration.

Objectives of continuing education activities may be updating, remedial training, or reorientation.

Continuing education may be provided at the institutional, municipal, provincial, and national levels, the criterion being that the jobs of the health workers involved are relevant to the education being provided.

National courses are open to personnel from all over the country and are convened by the National Directorate of Higher Education, regardless of where they are to be held.

Continuing education activities may be part-time or full-time; in the latter case, the participants are completely released from their day's work, even if the activity is taking place within their own unit.

Continuing education activities include courses, practical in-service training, retraining, pre-congress courses, international courses, language courses, and a variety of other short learning events. A diversity of learning methods is used for each of these activities, such as lectures, practical teaching sessions, seminars, workshops, debates, and round tables.

The work of the National Directorate of Higher Education is based on the organizational structure and the types of continuing

education activity described above and is coordinated into an overall plan that takes account of the needs and priorities of the health system at the different levels.

The identification of needs and the setting of priorities for the national plan takes account both of health policies and plans and of personnel requirements and is based on exchanges of information and suggestions between the provinces and the central administration.

In drawing up its own plans, each province, municipality, and unit takes account of its own particular problems and of the suggestions from the national level. National and provincial advisory groups and research institutes of the health system play an important role in the preparation of plans, providing expert knowledge on the existing situation in each speciality and on the prospects for development.

In order to support and strengthen its work, the continuing education subsystem makes use of a whole range of audiovisual devices. The central department develops slides, filmstrips, and video cassettes for distribution to all the provinces that have projection equipment available. These programmes are further complemented by printed materials, which reach even the most distant units of the country.

Results so far

The Ministry of Public Health has found in continuing education the ideal vehicle for the rapid dissemination and application of its new policies and programmes, capable of involving large numbers of doctors, dentists, pharmacists, nurses, and other technicians, who are thus able to ensure, not only individually but jointly as part of the national health system, that these policies and programmes are successfully implemented.

Continuing education has helped the national health system to achieve its proposed objectives, but its success was also possible because the whole programme was designed on the basis of the needs, resources, and constraints of the system, making use of its structure and organization and taking account of its possibilities and present and future requirements.

Over the years, efforts have been directed towards the establishment and consolidation of the subsystem, using organizational methods that ensure the participation of health professionals and technicians on a large scale. The number of activities carried out and the number of participants enrolled is an objective reflection of the success so far achieved.

A special plan for the recycling of medical staff assigned to units that have neither teaching nor research activities was initiated in 1980, with the aim of ensuring that every general practitioner or specialist covered by this plan would receive a month's retraining every three years at a teaching institution. Over the following three years (1980-1982) 847 doctors took part in these activities.

From 1975 to 1982, the Department of Audiovisual Medical Education produced 298 audiovisual programmes, comprising 188 sets of slides with recorded comments and 110 video cassettes. All the programmes have been reproduced and distributed throughout the country. Support from the Pan American Health Organization has been a factor of paramount importance for the completion of this work.

The introduction of indirect teaching methods using programmed learning has made it possible to ensure that health personnel receive refresher training on a regular basis, without interfering with periods of social service, when they are working in isolated units.

The Hermanos Ameijeiras Hospital has become a centre for higher education for high-level refresher courses addressed to specialized health personnel from within the country and abroad, as well as for other professionals such as biologists, biochemists, chemists, psychologists, and electrical engineers specializing in medical equipment.

Future development

The following factors have been taken into account in projecting the future activities of the higher education subsystem:

- the number of professionals and technicians working in the national health system, including the annual supply of new health workers;
- the policy for the development of the health system in general and for health personnel development in particular; and
- the policy for the development of postgraduate education in the country.

The development of continuing education activities should match the projected increase in the supply of health personnel. The system has an annual intake of between 6000 and 7000 middle-level technical graduates, about 2000 doctors, and a smaller number of dentists. Thus, in order to implement the planned policy of training professionals and technicians, the continuing education plans must be expanded and refined in the light of training requirements.

This implies the need to develop other forms of teaching suited to the different levels of the system and to establish an evaluation process to assess the results actually achieved, not only in teaching but in the application of the competences developed and in their ultimate impact on health activities.

Work has already begun on the development of a Centre for Further Medical Education, with branches in each province, the aim of which is to develop methods, model activities, experimental activities, and teacher training for the subsystem. These centres will have the task of carrying out relevant research in continuing education.

The development of continuing education as part of the health system has highlighted the need to ensure that learning materials are developed on a large scale for the further training and specialization of professional and technical staff. With this in view, work is under way on a national centre for learning materials.

ANNEX 2

ESTABLISHMENT OF THE NATIONAL CENTRE FOR FURTHER TRAINING IN THE HEALTH PROFESSIONS, CUBA¹

The training of teachers for middle-level health disciplines and for existing nursing education programmes was begun more than five years ago. At the same time, plans for the continuing education of teaching staff have been developed, using the facilities available within the country's continuing education programme.

The development of the subsystem for the training of health technicians and nursing personnel, and the rapid advances in science and technology, have led to the establishment of a highly specialized centre—the National Centre for Further Training in the Health Professions—which will centralize not only the training of teachers for most health disciplines needed in the subsystem but also the more complex aspects of continuing education in the field of educational methods and health technology.

Consideration has been given to research on the vocational development of children and young people, who will form the health workers of tomorrow, and to other vital research for permanent feedback to the process of formation of health manpower. The need for highly qualified staff to create and improve a stock of learning materials for use in the network of teaching centres throughout the country has also been recognized, as has the need for a documentation centre to keep the competence of the teaching staff up-to-date.

Objectives

The training centre has the following objectives.

1. To train graduate nurses and health technicians as teaching staff to work in the health schools and polytechnic institutes and in practical fields in accordance with the general principle of integrated development of health systems and personnel (*integración docente-asistencial*).

¹This annex is a condensed version of a paper prepared for a meeting on Coordination of Continuing Education Programs and Supervision, convened by the Pan American Health Organization in Washington, DC, USA, 12-16 September 1983.

2. To provide teacher training to eligible nurses and technicians from other interested countries.
3. To implement national activities of continuing education for current teaching staff, with the aim of updating and upgrading their skills on the pedagogic, scientific, and technical aspects of their specialities, a task that must be done centrally because of its complexity and the large number of events involved (short courses, workshops, seminars, practical training, etc.)
4. To provide continuing education (courses, seminars, workshops, practical training, etc.) for eligible health teaching staff from other interested countries.
5. To participate, under the methodological supervision of the Ministry of Public Health, in the development of curricula for the training of basic and postbasic nursing staff and health technicians.
6. To participate, under the methodological guidance of the Ministry of Public Health, in the development of continuing education activities for health teaching staff at this level.
7. To develop educational research on the teaching of middle-level health workers.
8. To participate, under the methodological supervision of the Ministry of Public Health, in programmes to develop vocational interest and give career guidance to students in the primary and secondary schools of the national education system.
9. To develop methods of monitoring the effectiveness of the vocational development programmes applied to students in the health field.
10. To develop studies on assessing the quality of graduates in educational technology at this level.
11. To test curricula and programmes designed for the training of nursing staff and health technicians prior to their use in the rest of the country's training centres.
12. To contribute to the development of a stock of learning materials, such as textbooks, guidelines, and audiovisual aids to back up the basic and postbasic training given in the country's health polytechnic institutes and to help in the continuing education activities of the subsystem.
13. To provide information support on general and health services teaching matters through a department of information.
14. To produce printed materials in support of basic, postbasic, and continuing education.
15. To support supervision and control in national health schools and polytechnic institutes.

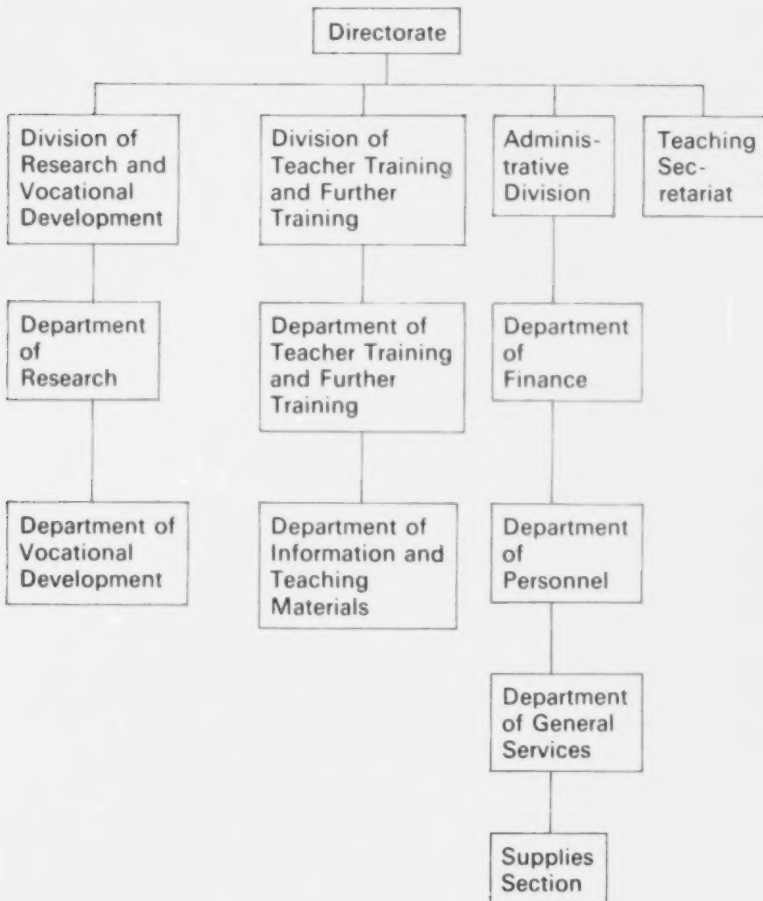
16. To collaborate with other national and or international institutions and international agencies in any of the above-mentioned activities.

Structure and staff

In its first year, the centre had a staff of 137, including 57 teaching staff made up of educators, psychologists, sociologists, mathematicians, and teachers for the training of nurses and health technicians. The remainder were administrative personnel, other technicians, and clerical workers.

The centre carries out its work with the help of teaching staff from the Ministry of Public Health and from the network of teaching health care institutions and research institutes in Havana.

The structure of the centre consists of a directorate with a teaching secretariat and three divisions, as indicated in the following chart.



Operational capacity and facilities

The centre comprises a five-storey main building and two annexes and can at present accommodate 42 teachers for continuing education activities and 120-200 students for teacher training courses.

In its first year of operation, the centre had rooms for lectures, workshops, and seminars, a kitchen and refectory for students and staff, and a hostel for the students. The physical plant is being expanded to allow for the installation and equipment of teaching laboratories, the central library, and an experimental classroom. A two-storey annex to the central building will accommodate the relocated refectory and storage areas and three rooms for workshops and seminars.

These buildings are located on a central city site near the teaching hospitals, research institutes, and other health care teaching centres that provide a setting for practical experience both in the teacher training courses and in the continuing education activities and experimental basic courses. The centre is also close to the National Information Centre for Medical Sciences.

Teacher training programmes are currently being carried out in the following disciplines: general nursing, paediatric nursing, obstetric nursing, pharmacy, medical statistics and registry, diagnostic radiography, hygiene and epidemiology, physiotherapy and rehabilitation, dental prosthetics, and laboratory work.

The centre can provide training for approximately 200 students each year on one-year teacher training courses. Since the average length of continuing education courses and activities is two weeks and the duration of the academic year is 11 months, the centre could provide short courses and other continuing education activities for about 1000 teachers.

Two experimental basic courses, in general nursing and in paedology, are at present being tried out.

ANNEX 3

ANNUAL PERFORMANCE ASSESSMENT¹

The annual performance assessment of health workers should be carried out in accordance with the following instructions.

Complete a formal, written evaluation of each employee at the health centre once a year. Record this information on the Annual Performance Evaluation form (see the sample form on page 100). The form becomes part of the employee's permanent record, and forms a basis for decisions on salary increases, promotions, transfers, continuing education, and other benefits for the employee.

The form is designed to involve both the employee and the supervisor in reviewing performance, identifying areas that need improvement, and planning ways to make the improvement.

Step 1

Gather the employee's job description, a copy of the previous year's performance evaluation form with the plan for improving performance, and any other materials from the employee's personnel file that relate to job performance in the past year.

Step 2

Compare the employee's performance in the past year with the job description and last year's plan for improving performance. List strengths and areas that need improvement. List ways that the employee's strengths could be used more effectively. Examine the underlying causes for the areas that need improvement. List the ways in which these weak areas could be improved. Determine whether or not the employee requires closer supervision or additional training to improve. If on-the-job training is required, think of how this could best be achieved.

Step 3

Review Part I of the form with your district supervisor.

¹ From: *Health center operations*, Honolulu, HI, John A. Burns School of Medicine, University of Hawaii, 1982 (MEDEX Primary Health Care Series, No. 30) pp. 102-105.

Sample form

Annual performance evaluation

For all full-time employees

Part I To be completed by supervisor before meeting with employee

Name Sione Tumals Employee no. 2967
 Job title Auxiliary Nurse Date of employment 1 June 1982
 Location Satofon Health Centre Date of the evaluation 15 Dec 1987

Employee's strong points: Prompt and reliable; gets along well with patients and fellow workers; takes part in community activities.

These strong points can be used more effectively by doing the following: Ability to get along well with others can be used more effectively by visiting communities and doing more community health work.

Areas that need improvement Improvement in clinical skills, especially more care and thoroughness in simple treatments.

These areas can be strengthened by doing the following: Clinical skills can be improved through refresher training carried out in the health centre, and with some special work at the district hospital.

Part II To be completed by supervisor and employee together

Plan for improving performance for the coming year

Clinical skills to be developed by working with the supervisor one morning per week in the health centre, supplemented by one day per month in the district hospital. To be arranged by the supervisor.

Comments A good discussion has resulted in a plan for improving performance

Performance review dates for the coming year 15 January 1988

15 March 1988 15 September 1988

15 June 1988 15 December 1988

Signature of employee S. Tumals

Date 15/12/87

Signature of supervisor Malia Vailima

Date 15/12/87

Signature of personnel officer J.F.S.

Date 6/1/88

Step 4

Prepare to meet the employee to review his or her performance and plan any necessary improvements. Give advance notice of the meeting so that the employee has time to reflect on the year's performance. Allow ample time for the meeting, including time for preparing the joint plan for improvement. Make sure the employee has adequate time to explain his or her point of view and to ask questions. Do not be in a hurry during this meeting. About two hours will usually be required.

Step 5

Begin by explaining the purpose of the meeting. Be frank, objective, and fair in discussing the employee's performance on the job. Compare performance with the standards in the job description or in last year's plan for improving performance. Avoid making comparisons with other health workers.

Discuss the employee's strengths and areas that need improvement, which you noted on Part I of the form. Together, discuss the causes for both. The causes of the strengths may help suggest ways to work on the areas in need of improvement. Decide with the employee which of the causes might be due to the employee, which to the supervisor, and which to the job situation. Causes due to the supervisor might be failure to give clear instructions, not communicating what is really expected from the work, or not providing adequate training. Causes due to the work situation might be the lack of equipment, interference by other employees, or excessive demands by patients. This discussion is intended to identify causes. Be sure that it does not become a way to place the blame for poor performance on someone else. Once you identify the causes of poor performance, you can do something to correct the situation.

Together, decide on goals for improving performance during the coming year. Make them realistic, yet challenging. Take into account the employee's strengths, areas in need of improvement, and the causes discussed above. Write the goals down.

Together, decide on actions to be taken to achieve the goals. Discuss different ways to improve performance. Select the best ways, and write them down.

This becomes the plan for improving performance for the coming year. Agree on the plan. Write it on the Annual Performance Evaluation form. Agree on times for review of the performance improvement plan. This might be every three months. Write the dates on the form. Do not wait for a whole year before formally checking up on the employee's progress.

Under the 'comments' section of the form, add any ideas that arose during the discussion that might help in reaching the employee's goals.

Step 6

At the end of the meeting, both you and the employee sign and date an original and two copies of the evaluation form. Submit the original to the district supervisor. Place the second copy in the employee's personnel file. Give the third copy to the employee.

End the review on a positive note. Point out to the employee the opportunities available to improve performance, and how this will help him (or her) and the health team. Assure the employee that you will do your part. Arrange another time to meet. It might well be the same day or the next day.

Step 7

Work with the employee on the specific tasks that were agreed on in the joint improvement plan. Hold review sessions on the dates agreed. Provide support, leadership, and motivation on a daily basis.

ANNEX 4

USE OF QUESTIONNAIRES¹

Survey of health workers' needs and problems

Health workers should play an active part in the planning and evaluation of a continuing education programme. Such a programme will succeed only if the health workers find it interesting and relevant to their needs. Thus the health workers should be asked what their problems are and what kind of things they would like covered in a continuing education programme. This is the purpose of the following questionnaire.

The questionnaire may be completed by any member of the district team, by interviewing health workers at the facility being visited.

Questionnaire

District: _____ Date: _____

Type: _____ hospital _____ health centre _____ dispensary
_____ other

Observer: _____

Type of health worker: _____

Ask each health worker the following questions, and record the answers in the spaces provided.

1. How long have you been employed at this health facility? _____
2. What in your opinion are the three most serious health problems in your catchment area?
 - a. _____
 - b. _____
 - c. _____
3. What are the most serious problems of your job? (list in order of importance)
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____

¹ Adapted from: *Continuing education for health workers*. Nairobi, African Medical Research Foundation, 1983, pp. 79-81 and 86-91.

4. What subjects would you like to be covered in a continuing education programme?
 - a.
 - b.
 - c.
 - d.
 - e.
5. Other comments:

Survey of health workers' performance

A series of questionnaires may be used to evaluate the performance of various health workers. How well are they doing their jobs? What are their major deficiencies? In what areas do they need more training?

Sample questionnaires are given at the end of this annex. They are not perfect, and you may wish to design your own questionnaires to suit your own needs.

How to design questionnaires to measure performance

A questionnaire that really measures performance should fulfil the following requirements.

1. The assessment should be objective and replicable. This means that two observers evaluating the same person doing the same task should come up with similar assessments.
2. The assessment should focus on the most critical aspects of the job—that is, aspects where failure to do the job correctly would have a serious effect on the patient.
3. The assessment technique should be practical and should yield the most useful information for the least cost in time and money. For example, a 300-question check-list may provide a lot of information but would not be practicable. One needs to strike a balance and try to keep the questionnaire as simple as possible.
4. The tasks assessed should be representative. That is, they should give an indication of how well health workers perform all their tasks. If you observe a nurse giving an injection, for instance, the care he or she takes in doing so is likely to reflect the care taken in other clinical tasks. On the other hand, if you

observe the nurse filling out forms, this may not tell you very much about clinical skills.

5. The most critical aspects of performance should be assessed by more than one method. For instance, if you decide that proper sterilization of equipment is a critical skill, you might (a) ask the health worker to list the steps in sterilization, and (b) observe the health worker sterilizing instruments.
6. The assessment should predict future performance—that is, it should help you to gauge how the health worker might perform the same task in the future. Bear in mind that an assessment measures only what the health worker can do, not what he or she will do. That is, it reflects the potential upper limits of performance.
7. The assessment procedure should provide a guide to learning. If, for instance, you use a check-list to assess how well a nurse gives an injection, that same check-list can be given to the nurse afterwards to help her learn the correct steps of the procedure.

Assessment of clinical performance

Performance assessment questionnaire A given on page 106 is designed to evaluate the clinical officer, medical assistant, or other health worker who is diagnosing and treating any patient regardless of their chief complaint. The purpose of the questionnaire is to determine:

1. How thoroughly the health worker takes a relevant history and carries out a physical examination.
2. How accurately he or she diagnoses various illnesses.
3. How appropriately he or she prescribes treatment.
4. How clearly he or she explains the problem and the treatment to the patient.
5. How the health worker behaves in general towards the patient.

There are several ways in which a questionnaire might be designed to assess these actions. The simplest way is to ask questions such as 'Did the health worker take a relevant history and carry out a thorough physical examination?' and so forth. The observer then simply fills in 'yes' or 'no', according to personal opinion. The problem with that type of questionnaire is that it is not very objective. One observer may feel that the health worker did a good job, while a second observer may feel that the health worker performed poorly. And we have no way of knowing how each observer reached these conclusions.

Another way to design the questionnaire is to specify the criteria for good performance. For example, we could make a check-list of

the questions a health worker should ask when taking the history of a child with fever (see Performance assessment questionnaire B on page 107). Then we could see how many of the questions the health worker actually did ask. This way of assessing the health worker—by using specified criteria—is much more objective since all observers will use the same criteria. The disadvantages of this approach are that the questionnaire is more complicated and you will need a different questionnaire for each complaint you want to evaluate. You may wish to design such check-lists for the four or five most common complaints in your district; you will be sure to see at least a few patients with those complaints during your visit to the health facility.

It is possible to build a simple scoring system into your questionnaire to help you compare the performance of one group with another by awarding a certain number of points for each task the health worker performs correctly. If everything is done correctly, 100 points are scored. Very few health workers will score 100 points on any evaluation, but you can choose a minimum acceptable score.

It is also possible to examine the questionnaire section by section to see what specific areas caused problems for the health workers. Did they all get high scores on history-taking but low scores on diagnosis?

Having the results of your survey in the form of figures will help when you return to do an evaluation. The following example shows how this comes about. Suppose that, among all the health workers observed, the average score for taking a history of a child with fever was 15. You then gave a refresher course, stressing history-taking in fever. Six months later, you observed the health workers again. This time, the average score for taking a history of a child with fever was 25. The figures provide an objective measure of the improvement.

The clinical assessments are best filled out by the medical officer, clinical officer, or medical assistant from the district health team.

Performance assessment questionnaires

A. Staff handling of patients

Fill out one form for each patient whose examination you observe.

District: _____ Date: _____

Facility: _____

Type: _____ hospital _____ health centre _____ dispensary
 _____ other

Observer: _____

Type of health worker: _____

Patient's chief complaint: _____

Assessment of health worker's handling of the patient:

	Satisfactory		Unsatisfactory		
	4	3	2	1	0
a. Made the patient comfortable					
b. Asked important questions					
c. Made appropriate physical examination					
d. Recorded relevant data					
e. Arrived at correct diagnosis					
f. Gave clear instructions to the patient					
g. Prescribed appropriate drugs					
h. Instructed the patient on the correct dosage and duration					
i. Gave health education					

Comments:

How long did the examination and treatment take? _____

Patient reaction (ask the patient afterwards, e.g., at the pharmacy):

a. Are you satisfied with the treatment you received?

_____ yes _____ no

b. Can you explain the instructions you were given?

_____ yes _____ no

B. Evaluation and management of fever in children

District: _____ Date: _____

Facility: _____

Type: _____ hospital _____ health centre _____ dispensary
_____ other

Observer: _____

Type of health worker: _____

History-taking

Did the health worker ask the following questions? Yes No

How long has the fever been present?

Has the child been exposed to measles?

Yes No

Has the child had a cough or sore throat?		
Has the child had diarrhoea or vomiting?		
Has the child had ear pain, discharge, or pulling at the ears?		
Has the child had painful urination or loin pain?		

(Score 5 points for every 'yes'; maximum possible score = 30 points.)

Physical assessment

Did the health worker:

Yes No

Take the temperature?		
Check the rate and ease of respiration?		
Check the skin for rash or abscesses?		
Check the fontanelle for bulging (in infants under 18 months)?		
Check the eyes for jaundice and anaemia?		
Check the ear-drums for bulging (with auriscope)?		
Check the mouth for Koplik's spots?		
Check the throat for redness, exudate?		
Check the neck for stiffness?		
Check the neck for enlarged, tender glands?		
Check the chest for retractions, crepitations?		
Check the axillae and groin for enlarged glands?		
Check the joints for redness and swelling?		
Examine the urine?		
Examine a blood slide?		

(Score 2 points for every 'yes'. Maximum possible score = 30 points.)

Diagnostic accuracy

Go down the list of signs and symptoms and tick those that the patient had; then see if the health worker came to the diagnosis corresponding to those findings. Score 15 points if the answer is 'yes'. Score 0 if the answer is 'no'.

If the health worker found:	Was the diagnosis	Yes	No
Koplik's spots, or red rash, or photophobia, red eyes, rhinorrhoea,	measles?		
sore throat and swollen glands, or tonsillar swelling, or pus on throat or tonsils,	streptococcal pharyngitis?		
earache and dull, red eardrum, or pus draining from ear,	otitis media?		
dyspnoea and tachypnoea, or nasal flaring and chest retraction, or cyanosis,	pneumonia?		
headache and stiff neck, or bulging fontanelle in infant, or Kernig's sign,	meningitis?		
loin pain and tenderness, or dysuria, or white blood cells/ bacteria in urine,	urinary tract infection?		
chronic fever, or anaemia and splenomegaly, or positive blood slide, or no indications of other illness in endemic area.	malaria?		

Appropriateness of management.

Find the diagnosis made by the health worker and check whether the appropriate management steps were taken. Add up the total points scored for the management of that (one) diagnosis. Deduct half the points if the correct drug was given in improper dosage or duration.

If the
diagnosis
was:

Did the health worker give:

Yes

No

measles (uncompli- cated),	any drugs?	0	15
streptococcal pharyngitis,	penicillin for 7 days?	10	0
	other drugs?	0	5
malaria,	the malarial drug appropriate to the local situation?	10	0
	any other drugs?	0	5
otitis media,	procaine penicillin?	10	0
	any other drugs?	0	5
pneumonia,	procaine penicillin?	10	0
	hospital referral?	5	0
meningitis,	penicillin?	5	0
	chloramphenicol?	5	0
	hospital referral?	5	0
urinary tract infection,	sulfa drugs for 2 weeks?	15	0
unknown,	the appropriate drug in a malarious area?	15	0
any of the above,	instructions to mother on: importance of fluids?	2	0
	importance of food?	2	0
	sponging for high fever?	2	0
	not overdressing?	2	0
	follow-up?	2	0
(Maximum possible score = 25 points.)			

ANNEX 5

AN APPROACH TO TASK AND COMPETENCE ANALYSIS¹

The table below shows how each of the three tasks: (1) gathering, organizing, and recording data, (2) assessing data, and (3) managing problems and maintaining health, involve five kinds of ability that are to be expected of the health worker. Each compartment of the table can be described at length, and the description provides a means of evaluating the health worker's competence. A specific example is given of compartment C3, which relates to the interpersonal skills needed in the management of problems and the maintenance of health. The description shows how one might develop a specific clinical activity to evaluate or teach an ability related to the performance of this task. This example is from paediatrics. The reader should construct other examples.

Abilities	Tasks		
	1. Gathering, organizing, and recording data	2. Assessing data	3. Managing problems and maintaining health
A. Attitudes	A1	A2	A3
B. Factual knowledge	B1	B2	B3
C. Interpersonal skills	C1	C2	C3
D. Technical skills	D1	D2	D3
E. Clinical judgement	E1	E2	E3

Interpersonal skills required in carrying out general tasks involving problem management and health maintenance (i.e. compartment C3 above)

Specific clinical activities that could be used to evaluate the skills in individual health workers

The paediatrician should be able to:

Explain the management plan for each problem in a fashion appropriate to the social and intellectual level of the family

Counsels family of child with Down's syndrome regarding home or institutional care, taking into consideration their economic and personal circumstances

Explain the management of problems to patients in a manner that is relative to their age and facilitates their participation

¹ From: *Foundations for evaluating the competence of pediatricians*. Philadelphia, PA, American Board of Pediatrics, 1974.

Explain to the referring physician, when serving as a consultant, the steps necessary for managing the patient, family, and problem

Instruct allied health personnel in the management of the patient and family

Interact effectively in getting personnel of various agencies to make their services available

Takes time to hear data and impressions supplied by county social caseworker concerning family of patient undergoing chronic renal dialysis

Interact with the family to learn the effect of life-style on family functioning

ANNEX 6

A CHECK-LIST FOR PREPARING A POLICY STATEMENT

The following check-list is not a series of steps that must be followed in sequence in every situation, neither is it an exhaustive list of all the actions that could possibly be undertaken. Readers should decide which steps are applicable in their own situations.

Identify the authority

The policy relates to a body or organization that will formulate and/or implement the policy. This body may be part of a Ministry of Health, part of a professional association, or part of an educational institution. It may be national or may serve only a part of a country. In every case this body can be called the 'continuing education agency', but it will be necessary to specify the organizations or authorities to which the continuing education agency is responsible.

Identify the needs for a system of continuing education

There are various potential needs for continuing education that should be specified rather precisely in the policy, which should indicate the groups of health workers involved and the health care problems calling for continuing education.

1. Check whether the national health plan includes explicit provision for continuing education.
2. Investigate the occurrence of prevalent diseases and study working procedures to identify weaknesses.
3. Consult the 'responsible authority' to identify its expectations.
4. Consult all institutions that may be involved in providing continuing education to identify their expectations.
5. Identify the needs of the health workers as expressed by individual health workers or their representative organizations.
6. Identify the expectations of potential funding agencies.

Specify the goals of the system of continuing education

The needs identified above should now be translated into goals for the continuing education system. In doing this it will be desirable

to have some general idea of the scale of the educational activities envisaged and of the time-scale involved.

1. Review the various needs identified above and reconcile inconsistencies in expectations wherever possible.
2. Restate the needs as goals.

Review resources and constraints

1. Review the general economic and social context in which health care is provided and in which the continuing education will take place.
2. Identify potential sources of financial support within the parent organization or among other agencies as appropriate.
3. Identify the people with managerial and educational expertise who are employed in continuing education or who might be available.
4. Review the supervisory methods used in the health care system to identify potential educational support.
5. Identify the available space for offices, classrooms, and printing, reproduction, and audiovisual equipment.
6. Identify the continuing education activities that already take place.

Identify strategies to achieve the goals using the available resources

1. Review the goals and resources identified above.
2. Outline possible alternative strategies to meet the goals, using available resources. This involves specifying in broad terms the number and types of workers involved, the functions and organizational structure of the system, and the kind of educational and management activities that will be undertaken.
3. Select the preferred strategy on the basis of feasibility, acceptability, and anticipated effectiveness.
4. Calculate the approximate cost of implementing the strategy.

Generate support for the policy

If the policy is to succeed, support in terms of willingness to endorse the policy will be required both within the health care system and in related institutions.

1. Establish and maintain relationships with all potential cooperating and funding institutions.
2. Create popular and professional awareness of the need for a system of continuing education.
3. Identify people with favourable attitudes to continuing education, both in the parent organization and in cooperating or funding institutions.

Prepare the policy document

1. Review the activities so far and identify the aspects of policy that have apparent support.
2. Write the policy document along the lines described in Chapter 4, taking into account the feelings of everyone who will be affected by the policy.
3. Indicate within the policy document how the continuing education system will be evaluated and define the body or organization to which the system is accountable.
4. Circulate the initial draft for comment to the people who will finally approve or reject the policy. Adapt the policy in the light of comments received, and submit the revised document for approval.

Part II
RUNNING A WORKSHOP

TIMETABLE AND COMMENTARY

The timetable provided in this section is for guidance only. It has been designed to guide the problem-solving process of the workshop, so methods are suggested, amounts of time proposed, and topics for debate and questions to be answered are put forward. All these suggestions depend on a number of assumptions about the kind of country in which the workshop is taking place and about the people who are taking part. Therefore it is entirely in order for the workshop team (possibly after discussion with the participants) to change this timetable and even the length of the workshop. For example, at a very simple level, the workshop day is scheduled from 09h00 to 17h00. This will be quite reasonable in a number of countries, but in other places it may be better to have a longer break in the middle of the day or to start earlier. Simply because this manual suggests 09h00-17h00 does not mean that this will be the best time for *you*.

Another place where changes may be made is in the content of the exercises. For example, on Day 2 there is an exercise on "preparing a policy document". In countries where a policy for continuing education has already been agreed on, this exercise should be substantially changed, perhaps by concentrating on examining the existing policy document. Or the exercise could be deleted to allow more time for other activities.

Because of these factors, each workshop will be different. The following timetable and commentary are intended to form the basis from which the workshop team can develop a programme that is appropriate to the specific place where the workshop is held.

The overall pattern of the workshop is as follows. It starts off with a general consideration of the importance of continuing education and the current state of continuing education locally (Day 1). Then the specific needs for continuing education are considered, leading to a policy for continuing education (Day 2). For this policy to be implemented, more consideration needs to be given to the activities planned and the resources they require (Day 3) and to the kind of organizational structures and mechanisms that will enable these activities to take place (Day 4). The evaluation of these activities and structures is an important element of the whole process and is considered on Day 5. The final session provides a bridge or link between the workshop itself and the real world by involving the workshop group in planning its own activities during the next few months, which will lead towards a fully effective system of continuing education.

Day 1

Is a system of continuing education needed?

- 09h00 Arrival—registration
- 09h30 Welcome and introduction to the workshop
- 10h00 *Exercise 1*—Is continuing education important?
- 11h00 Break
- 11h30 *Exercise 1*—continued
- 12h15 *Exercise 2*—What continuing education is currently available?
- 13h00 Lunch
- 14h00 *Exercise 3*—Is the current provision of continuing education satisfactory?
- 15h30 Break
- 16h00 *Exercise 4*—Are there resources for continuing education that are under-used?
- 17h00 Close

Commentary

This first day is primarily a day for introductions—to other participants of the workshop and to the present situation in continuing education.

During the registration period and the initial introduction session there will be some time to meet colleagues informally. The scheduled sessions are also designed to allow plenty of opportunities for the workshop participants to express their ideas and describe their experience, and so the process of getting to know each other better should continue throughout the day.

The specific exercises are also designed to be an introduction to—or a review of—the current health system and the consequent need for a system of continuing education.

Exercise 1 asks whether continuing education is needed from the point of view of providing an effective health system. The basic question here is whether all health workers are making the most effective use of the available resources. If not, could continuing education help them to become more effective?

Exercise 2 asks the group to look at the existing provision of continuing education. A list of all current activities should be produced during this session so that after lunch the group can consider whether the actual provision is satisfactory. Some desirable features for effective systems of continuing education are described in Chapter 2 of this book, and so the actual provision can be com-

pared with a theoretical ideal. Participants can then reach their own conclusions as to how closely they wish to approach the ideal.

Exercises 3 and 4 are concerned with the basic practical issue of improving the provision of continuing education. In nearly every situation there are facilities and resources that are under-used. People are available to teach who are not at present teaching. Teaching space is empty for part of the time. Teaching equipment could be used more often. Opportunities when people meet are not exploited. This session can thus identify some opportunities for improvement.

By the end of the day, the group will probably have:

1. Got to know each other better and begun to establish effective patterns of working.
2. Recognized that continuing education is of great importance in ensuring adequate standards of health care, in improving standards, and in changing the way in which health care is provided.
3. Become more aware of the kind of continuing education that is available locally and made constructive criticisms of what is currently done.
4. Realized what facilities and people exist that could be used to improve the provision of continuing education.

In summary, the day will have clarified the nature of the problem and identified the resources and constraints that should be taken into account in finding solutions.

Day 2

What are the needs for continuing education?

- 09h00 *Exercise 5* — What continuing education is needed in this area?
- 11h00 Break
- 11h30 Reports and discussion on Exercise 5
- 13h00 Lunch
- 14h00 *Review* — What is meant by a policy document?
- 14h30 *Exercise 6* — Preparing a national policy document for continuing education
- 16h30 Summary of progress on the policy documents
- 17h00 Close of formal session
- Group work to continue in the evening.

Commentary

During Day 2 the emphasis changes from a consideration of what is happening at the moment to thinking in terms of what should happen in the future. Put another way, the emphasis is changing from identifying the problem to an exploration of solutions.

The first session (Exercise 5) is concerned with the kind of things health workers should learn. It is very easy to say 'continuing education is very important' or 'we should organize in-service training'. It is rather more difficult to be precise about what should be learnt and who should learn it. Yet it is this more difficult task that the group is asked to undertake.

The way in which the exercise is designed means that the different groups working on this task will have slightly different points of view. This is intended to help each participant to realize the need to coordinate the ideas of these groups in the system of continuing education.

The afternoon session again asks the participants to undertake a virtually impossible task. Policy is not defined and formulated in one afternoon. Even so, it is possible to begin to explore and discuss the kinds of policy that would be appropriate for a particular country or area. To help them begin, Chapter 4 gives some guidance and examples of policy statements. These are not intended to be a guide to what an individual participant's policy should be; rather they give examples of some of the issues to be considered. Participants must consider what kind of policy is needed in their situations. Simply because a particular policy is followed in one country, it does not mean that it is right for another country.

While each participant's proposed policy document should be realistic (e.g., it should not imply that 20% of the health budget be spent on continuing education), it is obviously not the final policy document that will be endorsed and put into effect. Therefore members of the working group need not be unanimous in their support for each of the ideas contained in the document. This exercise is a way of stimulating purposeful discussion about policy; it is not the final decision-making process. By the end of the day, the group should have:

1. Recognized that data from morbidity/mortality statistics may not lead to the same conclusions as a study of health policies and plans or a study of the field situation.
2. Identified some specific skills needed by health workers and made some estimate of the scale of training required in terms of the number of health workers involved.
3. Begun to formulate a policy for the type of continuing education system that will be appropriate for the particular situation.

Day 3

From policies to programmes

- 09h00 Report on the policy documents prepared in Exercise 6
- 10h30 *Exercise 7*—What management activities will the system of continuing education be involved in?
- 11h00 Break
- 11h30 *Exercise 7*—group work
- 12h00 *Exercise 7*—review
- 13h00 Lunch
- 14h00 *Exercise 8*—Preparing an example of an educational programme for the system of continuing education
- 14h30 *Exercise 8*—group work
- 17h00 Close of formal programme
- Group work to continue in the evening where appropriate.

Commentary

Day 3 starts with each participant thinking more specifically about what is actually going to happen in his or her country or area.

Day 1 was spent in looking at the issues of continuing education in general and reviewing the present state of affairs. Day 2 led to a statement of general intention (the policy document). On Day 3 these general intentions are to be translated into specific proposals for the activities and programmes to be undertaken within the system of continuing education.

There are two rather distinct types of activity involved in continuing education. The first comprises management activities such as the coordination of participating agencies, the mobilization of resources, budgeting, and the provision of educational equipment. These are essential supporting operations.

The second is purely educational. For example, it may have been decided that primary health care operations are not proceeding as expected or that antibiotics are not being properly prescribed. So an educational programme must be designed to try to improve these situations.

It is not advisable to separate completely these two types of activity, since in practice they overlap and interact.

Exercise 7 is concerned solely with management activities. Obviously the time available is insufficient to consider this to the level of detail at which the activities and programmes can be implemented. Rather, the point of this exercise is to increase aware-

ness among the group of the range of activities that must be considered in designing, operating, and evaluating a continuing education system and to consider the very broad balance needed in the participants' own countries or areas. For example, one of the activities suggested in Chapter 5 is the writing of manuals. The workshop group should consider whether there is in fact a need for manuals for the health workers in their areas. If manuals are needed, could they be written and printed locally? Are manuals of greater priority than other possible activities?

Exercise 8 considers some of the specific issues involved in planning an educational programme.

By the end of the day, the group should have:

1. Recognized the wide range of management activities involved in a system of continuing education and made a preliminary estimate of activities that are locally important and of the resources required.
2. Followed the process of planning an education programme and realized the wide range of educational strategies available.

In summary, then, the day is spent in working out what the policy document would imply in practice.

Day 4

Organizing the system of continuing education

09h00	<i>Exercise 8</i> (continued — Presentation of group work and review)
11h00	Break
11h30	<i>Exercise 9</i> — Organizing the system of continuing education
13h00	Lunch
14h00	<i>Exercise 9</i> (continued)
17h00	Close

Commentary

Having decided what activities and programmes will be undertaken within the system of continuing education during Day 3, the purpose of Day 4 is to define the kind of organizational structure needed to support these activities.

The organizational structure for a system of continuing education is important. The system will need to carry out a number of functions, and so a mechanism is needed to ensure funding, liaison be-

tween institutions, the selection and follow-up of trainees, etc. Without this mechanism these functions will not be carried out efficiently and may not be carried out at all.

The organizational structure must also fit in with existing organizations and the local culture, so it is impossible to lay down an ideal structure that will suit all situations. The purpose of Day 4 is to allow participants to reach their own conclusions about the type of structure that would be appropriate for them.

Day 5

Evaluation and plans of action

09h00	Review of technical document — evaluation
09h30	<i>Exercise 10</i> — What questions should an evaluation answer?
11h00	Break
11h30	<i>Exercise 11</i> — What data will be needed in the evaluation?
13h00	Lunch
14h00	<i>Exercise 12</i> — Preparing a plan of action
15h30	Break
16h00	Evaluation of workshop
17h00	Close

Commentary

This is the final day of the workshop and so its most important function is to link the workshop with what is going to happen afterwards. The direct link between the workshop and the future is the plan of action prepared during the first half of the afternoon.

The schedule for the morning is to complete two related exercises on evaluating the system of continuing education. Evaluation is widely recognized as being important, yet it is only important if it is designed to achieve worthwhile ends, such as reaching decisions or answering questions. Therefore the starting point of evaluation is to decide what the ends are — the main part of Exercise 10.

Once it has been agreed what questions the evaluation should answer, it often becomes clear what data should be collected (though it may not always be feasible to collect as much data as one would like). The data to be collected are considered in Exercise 11.

Possibly the most important activity of the whole week is Exercise 12—preparing a plan of action. This should be a plan outlining the series of events following the workshop. Because it is so important, it might be desirable to reduce the time for Exercises 10 and 11, or even omit them altogether.

The plan of action should be a statement of what the workshop participants actually intend to do over the course of the next few months to move towards an effective (or more effective) system of continuing education. It will be this plan, and the way in which it is followed up, that will transform the workshop from just a talking shop into a place where significant action is generated.

EXERCISES

Exercise 1 — Is continuing education important?

Probably all participants in the workshop believe that the continuing education of health workers is important. Yet it is likely that others in the health system do not share this view or else believe that only a very small proportion of the health budget should be spent in this area. Therefore the starting point of this workshop is to review how important continuing education really is and possibly to identify some of the arguments that can be used to support claims for the importance of continuing education.

Another reason for starting the workshop in this way is to allow the participants to get to know each other better and to begin to establish ways of working together as a group.

The end point of the exercise will be the different answers given by various subgroups to a series of questions about continuing education. These answers may reflect differences of opinion between the subgroups, so they need not be finally agreed by the whole workshop group. On the other hand, agreement between the subgroups could provide the basis for future policy proposals concerning continuing education.

Chapter 1 explains some of the purposes of continuing education. Further discussion of the needs for continuing education can be found in Chapter 2.

Procedure

The whole workshop group should be divided into three smaller groups of 5–10 people.

Each group should have a chairman either designated by the workshop leader or selected by the group itself. The chairman's job is to help the group stay on the topic being discussed, encourage all members of the group to participate (avoiding the situation in which one or two members dominate the discussion), and keep the discussion moving so that all issues are discussed in the time available.

It will probably be useful to appoint a secretary or rapporteur who will keep notes of what is agreed.

Stage 1

Each group should agree on what they wish to include within the term 'continuing education'. In particular it should decide whether to include or exclude any of the following:

supervision,
 informal conversations between health workers,
 activities of drug companies in advertising and promoting their
 products, and
 postgraduate courses leading to further qualifications.

Stage 2

Each group should identify its response to each of the following statements. One way of doing this is to ask each member of the group to respond to the statements individually, and then to ask the group as a whole to try to reach an agreement afterwards. Participants should attempt to place each statement into one of the three categories below.

Statement	Not applicable or not true	True but not important	True and very important
1. Some health workers do not make best use of the health care resources available.			
2. Continuing education can improve the way in which health workers do their work.			
3. Health workers are promoted before they are sufficiently prepared for the new job.			
4. There have been significant changes in health policy in the last few years.			
5. There is a need to develop the competence of some health workers.			
6. The standards of health workers tend to become lower over the years.			
7. Health workers often want to learn more about their work.			
8. The initial training of health workers is sometimes inappropriate.			
9. Not enough money is spent on continuing education.			

(Additional statements may be added by the group.)

Stage 3

After the break, each of the three groups should present their report in the form of a large sheet of paper with their responses to

the statements marked. The initial presentations should be restricted to a maximum of five minutes to allow other groups to comment and debate the issues.

At the end of the presentations the different groups may well have reached some agreement about their responses to the various statements and possibly added some further comments. These responses can be typed and distributed as a record of the session.

Exercise 2 — What continuing education is currently available?

In Exercise 1 participants discussed whether continuing education is important. Now they should move on to review what is at present being done in their areas. Almost certainly there will be various things happening that will be new to at least some of them. It is important to be aware of all these continuing education activities in order to plan for the future, since any plan must take into account the current state of affairs.

At the end of this exercise the group should have a fairly complete, categorized list of continuing education activities.

Chapter 1 explains what is usually meant by the term 'continuing education' and describes some of the educational methods used. This may stimulate the participants to think about the whole range of continuing education activities provided locally.

Procedure

The method suggested for this exercise is 'brainstorming'. This is not just a free-for-all in which anybody can say anything, but a carefully designed activity. It is important to follow the stages outlined below in a fairly precise way in order to realize the advantages of this technique.

Stage 1 — Clarification of the problem

The workshop leader will explain the issue to be considered, i.e., all the activities that are at present taking place in each participant's area that contribute to the continuing education of health workers. All activities should be recorded, not just formal courses.

Stage 2 — The brainstorming session

The participants state aloud and at random any continuing education activity that is available to any group of health workers. They are told to think of any way in which health workers learn—not

just through formal courses. There should be no debate, no evaluation, no rejection of any suggestion on any grounds. The workshop leader has every suggestion recorded as quickly as possible on an overhead projector or on a large sheet of paper. Speed is important to help the flow of ideas. This stage continues until there are no more suggestions.

Stage 3 — The review

The suggestions are now reviewed by the whole group. This will enable each suggestion to be made completely clear, since sometimes what is recorded is too brief to be understood by everybody. It can then be decided whether to keep the suggestion in the list or not. At this stage it is also possible to check whether the suggestion represents a real activity or merely one that is desired. For example, the suggestion might be 'postgraduate courses'. This can now be supplemented with some specific examples of postgraduate courses that actually take place in the country of the participant who suggested it.

Stage 4 — Discussion

The various suggestions could be categorized during the discussion, if time is available.

Conclusions

The final list of current activities in continuing education should be typed out and distributed to the whole group, providing a useful reference when considering, after lunch, whether the current provision of continuing education is satisfactory.

Exercise 3 — Is the current provision of continuing education satisfactory?

This exercise will consider whether there is a problem in the present system of continuing education or not. If the latter, the workshop can come to an early close. But if there is a problem, it is important to describe it as precisely as possible so that a policy can be drawn up that will help to solve it.

The purpose of this exercise is to identify the criteria for judging whether the provision of continuing education is satisfactory and to apply these criteria to the local situation in each participant's own country. At the end of the exercise, the group should have a list of statements describing the features of an ideal system of continuing education. Beside each statement should be an

assessment of how far that feature is true of the actual system of continuing education in the participant's own country. Chapter 2 of this book will be found helpful in this connection.

Procedure

The workshop participants should be divided into three groups — possibly the same groups as for Exercise 1. Again a chairman and a rapporteur are required for each group.

Stage 1 (about 30 minutes)

Each group should consider the following statements and decide whether they are acceptable as descriptions of an ideal system of continuing education. Statements may be deleted or new ones added.

1. The system should have a unified approach.
2. The continuing education system should be closely related to the health system as a whole.
3. Continuing education should be available to every health worker.
4. Continuing education should emphasize the skills and attitudes required by health workers in their daily work.
5. Continuing education should lead to improvements in the way health workers perform their health care tasks.
6. Continuing education should be provided throughout a health worker's career.

Stage 2 (about 30 minutes)

When an agreed amended list of statements has been prepared, the groups should rate how far the ideal is achieved. So for Statement 3 (above), if the group feels that 20% of all health workers can realistically take part in continuing education, then 20% can be put by that statement. When statements cannot be rated numerically it is better to use categories such as:

- not achieved,
- achieved occasionally,
- usually achieved,
- completely achieved.

Stage 3 (about 30 minutes)

The groups report their conclusions to the whole workshop. Each report should consist of the group's agreed statements together with its assessment of the current state of continuing education as a percentage or verbal rating.

Conclusions

This session is likely to reach agreement on some desirable features of a continuing education system and to indicate that the present state of affairs is not entirely satisfactory. These conclusions will be useful when the group comes to consider (Day 2) what kind of policy is required to improve the situation.

Exercise 4—Are there resources for continuing education that are under-used?

The workshop will probably have found many weaknesses in the provision of continuing education during the previous session. Some of these will be due to limited resources of money, space, transport, or time, or resources that are not being used to the full. This session is intended to start participants thinking positively about the resources that are available.

The list of resources will be helpful in identifying ways of improving the provision of continuing education.

Procedure

The brainstorming technique will be used again in the following stages to obtain a list of available resources.

Stage 1 — Clarification of the problem

The main problem is likely to be the interpretation of the word 'resources'. It is intended to include people, buildings, equipment, money, and the agencies that might provide them—in short, anything or anybody that might be useful in continuing education.

Stage 2 — The brainstorming session

As in the previous brainstorming session, no comment or discussion is allowed. This might be a difficult rule to follow when somebody makes a suggestion that another participant knows to be impossible

(e.g., a building might be suggested that has just been allocated for a different purpose or demolished). However great the temptation, participants must leave any kind of comment until the next stage. They should concentrate instead on any ideas that lead on from previous suggestions (e.g., a participant might know of another building where there is vacant space).

Stage 3 — The review

The suggestions are now reviewed in order to clarify exactly what resource is meant—e.g., if the initial suggestion was 'radio' it should now be stated which radio station or type of radio is intended, and if possible a contact person should be identified. It should be shown that the resource does actually exist and could be made available.

Stage 4 — Discussion

The various resources suggested might usefully be categorized into, for example, money, buildings and institutions, equipment for teaching and printing, people who would be able to teach, communication methods, etc.

Conclusions

At the end of this session, there should be a list of under-used resources, which can be typed and distributed. This will provide a useful reference when considering ways of improving the continuing education system.

Exercise 5 — What continuing education is needed in this area?

Effective planning starts with the recognition of a problem. During Day 1, the problems associated with continuing education were discussed in general terms. Today the aim is to define the problems in a little more detail and to move on to the preparation of a policy document that will outline the way in which these problems are to be solved.

In this exercise participants will be asked to define the kind of continuing education that is needed. This will be described in terms of what a particular group of health workers needs to learn, who these health workers are, where they are located, and how many are involved.

The task of defining what needs to be learnt can be approached in a number of ways, e.g., by studying morbidity and mortality

data. These may show, for example, that over the years the incidence of preventable disease has not fallen, suggesting that the immunization programmes have not been effective. This may indicate a need to learn how to maintain the cold chain.

Another method is the observation of health workers in the field, which may show that some common practice is less than ideal, or to see how some specific recent development such as oral rehydration has been carried out and how it might be improved. Changes in health policy should also be examined, because they may require health workers to improve certain skills or learn new ones.

These three starting-points (health data, policy changes, and field observations) will yield examples of the kind of things that health workers need to learn, so providing the evidence for the need for continuing education. This can be used in the policy document (Exercise 6) to justify the value of a system of continuing education and to indicate the scale of educational programmes required.

At the end of the exercise each of the three groups will have prepared a table similar to the one below.

	Problem, or evidence of need	What needs to be learnt	Which health workers	Number	Where
1.	Continued high incidence of tetanus, whooping cough, measles. Survey shows vaccines ineffective.	How to operate cold chain, especially maintenance of refrigerators.	Medical assistants. Auxiliary nursing personnel.	420	Health centres throughout the country.
2.					

Each group should have completed several rows. The work of the three groups can be added together to form a larger table for typing and distribution.

Chapter 3 provides a background to the process of identifying needs. While it is not essential for Exercise 5, it will provide important guidance for carrying out a full assessment of needs. Material that would be useful to participants during the exercise includes:

- morbidity and mortality data plus any reports describing health problems;
- national health policies and plans together with job specifications;
- training curricula;

data from work studies or health system research carried out locally; and

reports from interviews with health workers on their attitudes to health for all by the year 2000 and to primary health care.

Procedure

The method suggested for this exercise is the technique called 'syndicate groups', in which the overall task is divided into parts and each of these parts is assigned to a different syndicate group.

Stage 1 (about 15 minutes)

Discussion of the general problem to make sure that all participants understand clearly what is required.

Stage 2 (about 15 minutes)

The participants are divided into syndicate groups. The grouping should not be done randomly but in such a way that each participant's experience can be used to the full.

Three groups are suggested. The first will consider the educational needs indicated by the statistical data and so should include people whose work involves an overview of health, such as statisticians, community health specialists, and public health inspectors.

The second group should consider the national or area policies for health and identify the consequent needs. This group again should include people with a broad view of health and some who have a responsibility for formulating or interpreting policy.

The third group should consider the evidence from the field and the observation of health workers. Of course there will not be enough time in the workshop to go out and observe directly, so this group should include participants with their own immediate experience of working with colleagues in the field and relying on memory. It would comprise supervisory staff and field workers.

Stage 3 (about 90 minutes)

The groups now work independently to prepare a table like that shown on page 134.

The first thing to be done is to fill in some examples in the first column (evidence of need). One of them might be 'The International Drinking Water Supply and Sanitation Decade', which has resulted in a major emphasis on the provision of water supplies and basic sanitation. As a consequence of this, partici-

pants might conclude, '70 medical assistants working in comparative isolation would need training in how to assist villages to install a water supply.'

Participants should consult any data relevant to their examples, such as morbidity and mortality figures, health policies and plans, and in doing so they should try to identify problems and trends. They might ask, for example, whether the health data show a satisfactory state of affairs or whether the incidence of preventable diseases is too high, whether the health policy has changed and if so whether all health workers have been satisfactorily prepared for their new role in its implementation, and whether job specifications for new roles are consistent with the training curricula. In one country a major element of the job description for a particular category of health worker was 'Managing the resources and personnel of a health centre', yet the curriculum of a three-year course had devoted only 10 hours to management. It should further be asked whether the performance of the health workers in the field is consistent with the job description, whether the standard of work could be improved, and whether different work should be attempted.

The groups must not try to cover the subject exhaustively; they can only hope in the time available to provide some examples. Therefore they should aim to complete as many rows as possible, rather than give a comprehensive list of needs without looking at the remaining columns.

The working methods for each group cannot be spelt out in detail, but it should be remembered that brainstorming can be very useful. Participants should not spend more than 20 minutes talking before filling in the first row on the table.

Stage 4 (about 90 minutes)

After a break, the three syndicate groups meet in a plenary session (i.e., all participants together) to present their findings. Each group should be allowed up to 15 minutes to present its report, leaving about 45 minutes for discussion.

The discussion should aim to tidy up the list by making meanings and wording clearer. It might also add to the list of examples, or remove certain examples.

The list of needs and their implications for education can be typed and distributed. Examples of learning needs will be used in Exercise 8.

Exercise 6—Preparing a national policy document for continuing education

Earlier exercises have considered the existing provision of continuing education, the deficiencies in this provision, and the need for

continuing education. Exercise 3 also considered what features of a continuing education system are desirable. Now is the time to bring these ideas together in the form of a proposed national policy document. If the workshop is at subnational level, the policy should be for the area from which the participants are selected.

The participants are most unlikely to have any statutory authority to prepare policy documents for the area, and so this exercise may seem to be a little pointless. However, there is merit in the group's trying to formulate a policy so as to obtain an overview of how a complete system of continuing education might work in the area and also to provide a basis for other groups with the necessary authority.

Policy documents can take a variety of forms, and the workshop should prepare a policy document that is consistent with local methods. Guidance is given in Chapter 4 about the contents or issues to be described, but if there are good reasons for doing something different the workshop should not be inhibited by this guidance.

The policy document is important because it provides a general framework for all activities in continuing education. The exercises carried out during the rest of the workshop should be consistent with the policy document prepared in this exercise.

Chapter 4 provides guidelines on what should be included in a policy document. Any available existing local statements of health care policy, health manpower policy, or training policy should be consulted.

Procedure

In this exercise the workshop participants should be divided into groups of about six people. Each group will then prepare its own policy document during the afternoon and possibly during the evening as well. All the groups will present their statements at a plenary session on Day 3.

The groups should be matched as far as possible so that each group has a similar composition in terms of professions, seniority, and the agencies for which they work. Obviously it will not be possible to achieve an exact match but the groups should be broadly similar because they will each be attempting the same task.

The groups should work independently so that different policies can be compared in the review session. On the other hand, this is not a competition, and it should be regarded as perfectly appropriate for a member of one group to help another group if specialist advice is needed.

The review session on Day 3 is likely to show some differences in points of view as well as areas of broad agreement. The latter should provide the basis for considering in more detail what kind of system of continuing education is required. This more detailed study will take place in Exercises 7 and 9.

Exercise 7 — What management activities will the system of continuing education be involved in?

The activities in a system of continuing education are broadly of two types. The first is concerned with the general maintenance or development of the system, such as the coordination of the different institutions in the system or the provision of financial support to different parts of the general educational programme.

Activities of this kind are listed in Chapter 5. They are very general in nature and constitute the necessary support for specific teaching programmes. The other type of activity is purely educational. Typically, a group of health workers is identified and a specific need recognized. This forms the basis for a programme of educational activities, which may include meetings, workshops, manuals, and courses. The two types of activity can be called 'managerial activities' and 'educational activities' for the sake of convenience.

In this exercise participants are asked to think about the management activity, while in Exercise 8 they will be asked to outline an educational activity.

Chapter 5 gives some of the management activities of systems of continuing education. Participants are asked what management activities should be planned and how much effort should be put into each of them.

At the end of the exercise the workshop should have produced a list of management activities that it feels should be undertaken by the system of continuing education.

For each activity there should be an indication of whether the activity is initial or continuing and of what resources should be devoted to it, together with a specific example of what it will involve.

Chapter 5 discusses these management activities and describes each of them in turn.

Procedure

Participants start by working in pairs. The pairs then join together to form groups of four people to discuss and reach agreement on their combined point of view. Finally the groups of four review their conclusions in a plenary session.

Stage 1 (about 30 minutes)

The group is divided into pairs. Each pair should then read or review Chapter 5 to ensure a complete understanding of what is meant by the suggested activities. Additional activities may be suggested at this stage.

Stage 2 (about 40 minutes)

The pairs aim to complete the following table:

Management should:	Whether activity is initial or continuing	Resources needed (person-years)	Example
1. Identify current activities			
2. Identify needs			
3. Create awareness			
4. Coordinate activities			
5. Finance activities			
6. Provide central facilities			
7. Train teachers			
8. Produce materials			
9. Prepare manuals			
10. Coordinate reassessment			
11. Liaise with supervisors			
12. Define curricula			
13. Provide continuing education			
14. Select learners			
15. Provide feedback			
16. Carry out evaluation and research			

The column headed 'Whether activity is initial or continuing' should be completed with either letter I or C to indicate whether the activity is one that needs to be done only when the system of continuing education is being established, and so is an initial activity (I), or whether it is something that continues at more or less the same level of intensity for a number of years, and so is a continuing activity (C).

Before deciding whether an activity is worth doing, it is important to consider the resources required for it. This should be summarized in the table by the number of person-years needed every year or, for an initial activity, the total number of person-years. If participants think an activity would take two people about three months' full time work, they should record $2 \times \frac{3}{12} = \frac{1}{2}$ under the 'Resources needed' column. If they think it would take seven people about half their time throughout the year, they should record, $7 \times \frac{1}{2} = 3\frac{1}{2}$. If they think the activity should not be done at all, they should put 0 in the 'Resources needed' column.

Obviously personnel are not the only important resource, but for the purpose of this exercise participants should ignore all other resources—they will need to think about them more in Exercise 8.

If participants have time, they should record an example of what would be done. For example, if they think manuals should be written they should note down the title they would give the manual and state which health workers it would be intended for.

Stage 3 (45 minutes)

Each pair joins another pair to form groups of four. They should try to reach agreement on the resources needed for each activity.

Stage 4 (45 minutes)

The results should be reviewed in a plenary session. The chairman of the plenary session must attempt to record the feeling of the workshop about the level of resources needed for each activity—but if there is a clear difference of opinion that cannot be quickly resolved, the chairman should simply record both opinions.

Conclusion

This exercise will have drawn attention to the wide range of activities associated with continuing education and will have given some indication of the importance of each activity as seen by the group.

Exercise 8 — Preparing an educational activity

Part of the purpose of this exercise is to illustrate that planning an educational activity involves much more than deciding on a teaching method (though this is very important and often poorly done).

The outcome of the exercise will be an outline of an educational activity that will meet one of the training needs defined in Exercise 5.

The issues to be considered in planning the educational activity are outlined in the procedure for this exercise. Further guidance can be obtained from *Continuing education for health workers*, which is available from the African Medical and Research Foundation, PO Box 30125, Wilson Airport, Nairobi, Kenya.

Procedure**Stage 1 (10 minutes)**

The exercise is introduced and the general ideas of planning an educational activity are reviewed.

Stage 2 (5 minutes)

The participants should be divided into groups of about six people. For this exercise, the same grouping as that used in the exercise on the preparation of the policy document might be appropriate.

Stage 3 (120 minutes with 30 minutes break)

In groups, the participants should set out to answer the following questions.

1. What needs or problems is the educational programme intended to solve?

It would be sensible here to take one of the problems or needs identified in Exercise 5.

2. What will the health workers need to be able to do in order to solve the problem?

The answer to this question will in effect be the learning objectives of the educational programme. This stage might also make use of the results of Exercise 5.

It is essential that this question be answered in terms of the learners' performance at the end of the course, rather than in terms of what they know of the topics covered. The process of working out what needs to be covered in the course comes much later.

3. How many health workers will be involved, what kind of health workers are they, and where are they located?

Again this is a review of the conclusions of Exercise 5.

4. Are the problems, the performance, and the personnel identified for this programme consistent with the policy document?

If the groups in this exercise are the same as the groups that prepared the policy document, they should consult their own document. If not, this stage may be omitted, although it should be recognized that checking with the policy document is an important part of programming.

5. What is the overall strategy for providing educational experience?

This is a key question and one that calls for imagination and educational expertise. Some options that might be considered are as follows.

- (a) Organize a workshop of the health workers concerned to discuss whether they recognize that the problem exists; then, using the solutions suggested by the workshop, train the health workers in educational methods so that they can help to improve the performance of their colleagues.
- (b) Prepare a manual to define the performance required and explain how it can be achieved; then call a meeting of the health workers' supervisors and show them how to observe whether the performance has been achieved and how to help the health workers develop this aspect of their work.

- (c) Arrange a series of courses that will be available to all health workers who wish to attend.
- (d) As for (c), but making attendance compulsory.

The range of possible strategies is enormous. They vary considerably in potential benefits as well as in cost, so this stage will require a lot of thought. Indeed, a brainstorming session within the group would be a good way of starting this stage so that ideas can be generated for later discussion.

- 6. What existing resources are available that will be of assistance in following the chosen strategy?

Reference to Exercises 2 and 4 will probably be helpful in answering this question.

- 7. What will the proposed programme cost?

It is desirable to obtain an overall picture of the financial cost of the programme—but there is little point in working this out in detail. An accuracy of plus or minus 30% is adequate at this stage.

It is legitimate (though perhaps confusing) to calculate the cost in different ways and thus obtain quite different figures. What is important is that participants are clear about the method used and that they state it. For example, in a programme in which supervisors are used as teachers, some costing exercises would include their salaries as part of the cost. Other costing exercises would be based on the assumption that the supervisors will be paid whether the programme takes place or not and would therefore omit their salaries.

Probably the best way to proceed is to list all substantial resources required under the headings of people, space, transport, materials, and equipment, then allocate a cash figure to each of the resources according to the local accounting practice.

- 8. When will the programme take place?

The group should identify the key stages in the programme and decide on the dates at which each stage will be started and completed.

It is easy to be over-optimistic about schedules, but if too much time is allowed unsatisfactory health care will continue for longer than necessary. So a realistic assessment of the shortest possible time is called for.

- 9. How will the programme be evaluated?

This question will be answered in much more detail in a later exercise, and at this stage only a very brief answer is needed. Essentially participants should try to find out whether the original problem has been solved. This can be done by giving a brief indication of the evidence that would be needed to

reach this conclusion. Participants should not go into details about how the evidence is to be obtained, since this is dealt with later.

Stage 4 (120 minutes)

The responses drawn up by the different groups are presented, reviewed, and discussed.

Conclusion

The workshop should by now appreciate the effort involved in providing continuing education to large numbers of health workers and should have suggested a variety of different educational strategies.

Exercise 9 — Organizing the system of continuing education

Organizational structures are important. At one extreme, programmes can be successful where they are run mainly by one person who has drive and expertise. However, in this situation, the programme is often totally dependent on that one person, and when he or she leaves the programme declines. At the other extreme, programmes can be so heavily organized in a bureaucratic way that all individual initiative is stifled by rules and regulations. Some middle course is required.

The aim of this exercise is for participants to consider the suggestions on organizational structure given in Chapter 7 and to decide which of them are appropriate to their own situation. In this way they should prepare their own plan for the organization of the system of continuing education in their country or area.

Different groups of participants should each produce their answers to the series of questions provided below. This will in effect be a proposal for the kind of organizational structure needed to support a system of continuing education. The proposal should be appropriate for the country in which the workshop takes place. It will be useful in guiding the plans of action that participants will follow after the workshop.

Procedure

Stage 1 (15 minutes)

The exercise is introduced and the general ideas of organizational structures are presented.

Stage 2 (30 minutes)

Chapter 7 is read by pairs of participants, who should ask each other about points that are not clear and briefly discuss the points that seem especially important in their own situation.

Stage 3 (45 minutes and 60 minutes, separated by lunch)

Participants are divided into groups of about six people to answer the questions listed below. Again, the same groups as those that prepared the policy documents should now discuss the organizational structure that will be appropriate to their policy document.

1. Where will the money and resources come from?

By this stage some very general idea of the total budget will have been formed, and now initial ideas of the sources of money, staff, equipment, etc. should be discussed. What will the ministry of health be asked to provide? Will existing educational institutions make contributions of staff, space, or other resources? Will the health workers themselves be expected to pay anything? Will other agencies make any contribution?

2. To whom will the system of continuing education be accountable?

Presumably all the agencies that make a contribution to the system will wish to have some say in the way in which these resources are used. Will this be done through an overall management committee that supervises the work of the system and has representatives from each of the contributing agencies? Or will some other structure be desirable?

3. Will the people working in continuing education be employed by a separate continuing education unit or will they be employed by a range of other institutions?
4. If a continuing education unit is planned, will it be part of the ministry of health or of some other agency (such as a medical school or college of health sciences) or will it be independent?
5. How will liaison be maintained between the various agencies involved (e.g., the ministries of health and education, training institutions, professional associations, and other organizations providing health care)?
6. Will the system of continuing education be centralized in one location or will it be distributed widely over the country or area as a whole?
7. Which individual or group will be responsible for planning and coordinating the day-to-day activities of the system?

These questions are intended to provide a framework for discussion. They should not be thought of as exhaustive, and groups should be free to debate additional issues. Nor should it be assumed that all the questions are necessarily relevant to every situation or that they can be completely answered at this stage.

Stage 4 (90 minutes, plus 30 minutes break)

Each of the groups should present its findings and review them. The review, as in previous exercises, should determine:

1. Whether the proposals are consistent with the policy document and with the planned programmes (i.e., is it likely that the organizational structure will tend to help in implementing the policy?).
2. Where the proposals from the different groups show agreement, and where they show differences.
3. The reasons for the differences where they occur. There is, however, no point in trying to resolve any differences because the workshop is intended only as a stimulus to ideas.

Conclusion

This exercise takes as its starting-point the need for continuing education in the participant's country and the types of functions or activities that the participant expects the system of continuing education to undertake.

From this base, participants should derive some ideas about the kind of organizational structures required. This should provide a fund of ideas for implementation after the workshop.

Exercise 10 — What questions should an evaluation answer?

Chapter 9, 'Evaluation', outlines the reasons why evaluation is necessary and how it can be carried out. Obviously this can be done only in general terms, and the suggestions made must be adapted in each individual situation. The purpose of the present exercise is to provide an opportunity for the workshop to begin this process of adapting ideas to the local situation.

The word 'evaluation' means the process of collecting data, presenting those data in a convenient form, and using them to form judgements or reach decisions. Some people hold the view that the data-collection process should be very open and any data should be considered. This exercise is based on the different as-

sumption that the data should be collected with a definite purpose in view. Both opinions can be justified and each has different merits. However, the purposeful collection of data does not prevent evaluators from being conscious of all sorts of data and taking them into account. So the emphasis here is on the purposeful collection of data.

The starting-point for evaluation is therefore to decide what questions need to be answered or what decisions have to be made. This approach indicates the kind of data that will need to be collected in order to answer the questions or reach the decisions. Exercise 10 stops at the point of deciding on the questions, while Exercise 11 goes on to look at the data needed.

A helpful way of deciding on the most useful questions to ask is to look at the matter from the point of view of the people affected. Probably the ministry of health will want some estimate of the overall impact of the system. Managers within the system will want to know how the various activities and procedures are progressing so that they can modify them. Teachers will want to know the effect of the various educational programmes so that they can systematically improve their teaching methods over a period of time.

It is suggested that the participants be split into three groups corresponding to the management committee, the managers of the system, and the teachers or supervisors.

Then each group should think about the questions its members will be called upon to answer and about the various decisions they will need to make.

At the end of the exercise there will be three lists of decisions to be made or questions to be answered by the evaluation process. These lists will correspond to the needs of different agencies—the overall management committee, the managers of the system, and the teachers.

Procedure

Stage 1 (5 minutes)

Three groups are formed to represent the points of view of the management committee, the system managers, and the teachers. Ideally people should be allocated to groups on the basis of their likely future roles in the continuing education system, but this is not essential and may not be feasible.

Stage 2 (60 minutes)

Each group prepares a list of decisions that its members might want to make (in their assigned roles as managers or teachers). Participants should also consider what questions they would want to be able to answer on the basis of the evaluation.

It may be useful for groups first to clarify the general nature of their task, using the brainstorming technique.

The groups should record their list, either as a transparency for overhead projection or on a large sheet of paper.

Stage 3 (25 minutes)

Each group presents its list of questions and decisions to the whole workshop.

Conclusion

The list of questions and decisions will guide the next exercise, in which the data to be collected in evaluation will be considered.

Exercise 11 — What data will be needed in the evaluation?

The overall purpose of this exercise is for the groups formed for Exercise 10 to decide what data will need to be collected. For example, one of the questions might be: 'Is the system of continuing education serving health workers in all parts of the country?'

Participants might decide that in order to answer this question they would need to know the location of each health worker taking part in continuing education programmes. Or they might decide that it would be sufficient to collect this information for a random sample of 100 participants. In each case, the information could then be summarized to enable the evaluator to answer the original question. As a result of this exercise, each group will produce a list of the data needed for the evaluation process.

Chapter 9 of this book describes the types of data that might be collected.

Procedure

The groups should draw up a table as shown below.

Questions to be answered or decisions to be made	Data needed
1. Is the system of continuing education serving health workers in all parts of the country?	1. Addresses of the places of work of each health worker taking part in continuing education programmes.
2.	2.

Within the groups the whole list of questions or decisions can be shared among the different group members. It is not necessary for the whole group to consider every question.

The review procedure could be done by each group writing down its findings on large sheets of paper, which are fastened to a wall or display screen. All the participants could then look at each sheet in turn and make suggestions about additions or amendments. Each group would have a reporter standing by its sheet to note down these remarks.

The reviewing process is completed by having each of the sheets typed, duplicated, and distributed.

Exercise 12 — Preparing a plan of action

The whole point of this workshop is that it will lead to some action. A system of continuing education will be established, or the existing system will be strengthened. Without some such outcome the workshop will be an expensive waste of time. It will not be sufficient for the participants to have enjoyed the experience or for them to feel that they have learnt a lot. The workshop must lead to some concrete development. In order to make this more likely, the final afternoon is spent in preparing a plan of action.

A plan of action is simply a statement of the events that should take place if the objective is to be achieved. For each event it is useful to specify a time when it should take place and to indicate who will be responsible for making it happen.

A useful layout—but by no means the only possible one—is given below.

Action or event	Starting date	Completion date	Person responsible
Report results of workshop to Minister of Health, Minister of Education	October 1987	—	Workshop leader
Establish a working group to formulate a continuing education policy	November 1987	—	Representative of Minister of Health
Working party formulates policy	November 1987	1 January 1988	Chairman of working group

The content of the plan of action must depend very heavily on the local situation and on what the workshop participants want to see happening.

The immediate end-point of this exercise is a statement or plan of action describing what the workshop participants intend to do after the workshop. The longer term result will be that the plan of action is followed and a system of continuing education will be established or improved in the participants' own countries.

The background data for this exercise comprises the results of all earlier exercises, since these show the type of continuing education system required.

Procedure

Stage 1 (5 minutes)

It is probably best to reconstitute the groups used for formulating the policy documents. Alternatively the whole workshop might work on a plan of action as a complete group. If separate groups prepare their own plans of action, time must eventually be spent in combining the different plans into a single plan that is acceptable to the whole group.

Stage 2 (10 minutes)

The group should first agree on a suitable end-point for the plan. This may be a fully operational system or a more modest objective, but it must be agreed before the various stages required can be considered.

Stage 3 (30 minutes)

One of the problems at this stage is to decide how much detail is required. It is suggested that the group start by listing the major stages in the achievement of the objective, and then, if time permits, it could break these major stages down into more detail.

Stage 4 (30 minutes)

The amount of time needed to accomplish each stage should be estimated as realistically as possible and noted down. Obviously some activities can take place at the same time as others. Equally it will be essential for some activities to be completed before others can begin. These factors should be taken into account in specifying a plan that will achieve the objective as quickly as possible. The person or group to be responsible for each activity should also be recorded.

Stage 5 (15 minutes)

The exercise will be concluded in a plenary session. This should aim to produce an agreed plan of action, which represents the views of the workshop group as a whole.

Conclusion

It is important to regard this plan of action in its proper light—as a guide to action outside the workshop, not as a purely academic exercise.

One possible consequence of the plan of action would be the establishment of a Continuing Education Centre within an overall organizational structure that would guarantee close liaison between the agencies responsible for providing health care, the training institutions, and the various health workers' representatives. However that is only one possibility, and the plan of action must lead towards developments that the workshop feels will be most appropriate.

Part III
WORKSHOP LEADERS' GUIDE

WORKSHOP LEADERS' GUIDE

Introduction

This guide is designed to help a workshop leader, or a workshop team, conduct a workshop on continuing education, based on the timetable and exercises given in Part II, and using Chapters 1-9 as background material. It covers the preparations for the workshop, the day-to-day running of the workshop, evaluation, and follow-up.

The role of the workshop team

In general, the workshop will be planned and conducted by a team with a leader and two or three other members.

Because the function of the workshop is to allow the participants to solve problems, suggest plans and make proposals, it might be thought that the role of the workshop team is not important. This is certainly not true. The success or failure of the workshop depends heavily on the quality of the preparations made by the team and on the way in which the team helps the participants to complete the activities. However, members of the workshop team need not be experts in continuing education, since the necessary background information is provided in Chapters 1-9 of this book.

The qualities needed in the members of the workshop team are outlined below.

1. Expertise in conducting workshops. Among the members of the team there must be people who can lead discussion (without imposing opinions or decisions) and who are good administrators. Experience of conducting other workshops is extremely desirable.
2. Status and authority. The workshop leader especially should be capable of commanding the respect of the workshop participants.
3. Time. Members of the workshop team must have enough time to prepare thoroughly for the workshop and all members should be available throughout the workshop.

The workshop team has duties to perform before, during and after the workshop.

Initially the work may involve stimulating interest in the idea of a workshop on continuing education systems and in seeking funds and authority to conduct the workshop (though of course this may

have been undertaken by others). Certainly the workshop team should be involved in the planning meeting which should take place about two months before the workshop, when the critical decisions about the management of the workshop are made.

During the workshop, the workshop leader should conduct meetings of the workshop team at the end of each day, and coordinate decisions about any changes to the timetable and to the activities planned for each day.

The workshop team (including the leader) will have only a very minor role as providers of information. Their function is to introduce the activities so that all participants understand the point of each exercise and what they are expected to do. They should also manage the activities as follows.

1. Ensure that the activities run more or less according to the agreed schedule.
2. Ensure that discussions keep to the point and are summarized.
3. Give appropriate sources of information that can help group work.

Another role for the workshop team is to check that all administrative arrangements agreed at the planning meeting are carried out efficiently.

The workshop team should also take responsibility for the timetable and the various activities and exercises during the week of the workshop. The timetable and exercises given in Part II of this book have been used successfully in workshops. However this does not mean that they will succeed in every situation or with every workshop team. Therefore it is essential for the workshop team to read the timetable, the commentary and the exercises well in advance. They should then adapt the programme and activities to suit the local situation.

The suggestions here should be seen as a basis which can be developed, not as an unchangeable package. Needless to say, all changes should be undertaken with care and with regard to the effect of a change in one part of the workshop on all the other parts. Any fundamental change which would transform the workshop into a series of lectures or remove the emphasis on the participants solving their own problems is strongly discouraged. Finally, the workshop team will be involved in evaluating the workshop.

Preparing for the workshop

Preparing for the workshop will involve making a series of detailed decisions about what the workshop aims to achieve and how it will be conducted. It will also involve choosing the participants and preparing them for the workshop. Various resources will need to be arranged and made available and initial plans made for evaluation.

The planning meeting

A planning meeting should take place about two months before the workshop. At the planning meeting, all the decisions needed for the workshop to run smoothly should be made. The following people should attend:

1. The workshop leader.
2. The other members of the workshop team (i.e., the people who will assist the workshop leader in conducting the workshop).
3. A representative of the host institution.
4. A representative of the organization that is funding the workshop.
5. A representative of the ministry of health and/or other organizations that provide health care in the country or region.
6. Possibly a representative or representatives of professional associations.

An individual may fulfil more than one of these roles, so that the number of people involved is kept to a minimum and decision-making can be rapid.

Before the planning meeting, all the people attending should read chapters 1, 2 and 3 of this book.

The agenda should include the following items (though additional ones may be necessary depending on local circumstances):

1. Participants.
2. Location.
3. Objectives and timetable.
4. Resources.
5. Administration.
6. Evaluation.

These agenda items are expanded below.

It is worth stressing again that the workshop timetable, commentary and exercises given on pages 119-150 are a guide and not a rigid prescription to be followed precisely. The workshop must be adapted according to the current state of continuing education, the participants, and the general needs, constraints and resources of the country. The planning meeting should consider this adaptation.

Participants

Selecting the participants

A list of the proposed participants is needed. Selecting participants is very important, since both the quality of the decisions and plans made during the workshop and the probability of these plans being implemented depend on who is involved.

The participants should ideally represent those responsible for making decisions concerning training of health workers. This means that there should be people from the following groups or organizations.

1. The Ministry of Health—concerned with allocation of resources, defining job descriptions, setting work norms and supervising health workers.
2. Professional associations and unions, representing all categories of health workers.
3. Teachers from medical schools, nursing schools, colleges and other institutions that provide training for any category of health worker.
4. Agencies involved in development or aid that might be interested in supporting activities in continuing education. These agencies will include the various international agencies but might also involve local foundations or companies that have provided support for education or health-related activities.

This list must be considered in the light of local circumstances to ensure that all influential groups that could either hinder or assist the development of continuing education are involved. They will then feel at least some commitment to support any proposals put forward by the workshop.

The above considerations are largely political in nature in so far as they attempt to smooth the path towards implementation of proposals. Another aspect to consider is that people with expertise in continuing education should also take part. Obviously there will be considerable overlap between the groups who have influence and those who have expertise, but it may happen that there are people with particularly valuable experience or ideas who should be invited to participate even though they have little power.

Participants should not be accepted for the workshop unless they are prepared to attend for the whole of the five-day period. The workshop requires full-time participation, so that group processes can develop and a feeling of group identity can be achieved. This is inevitably disrupted if some of the participants are there for only a few of the sessions. Therefore, it would probably be unwise to invite, for example, the Minister of Health as a participant, since it is unlikely that he or she would be able to devote the total period of the workshop to this single activity.

On the other hand, it might be possible to invite the Minister of Health or very senior members of the Ministry to give the opening address or to attend the closing session, so that they could meet the people involved and hear something of the ideas discussed.

A maximum of about 30 people should be on the list of participants. Having more than 30 people makes discussion sessions very difficult to handle and means that not everyone in the group gets a chance to participate actively. On the other hand, fewer than about 15 people may not be enough to provide useful discussion or to represent the many relevant interests involved.

Using the general guidelines given here as a starting point, the local workshop organizers must use their own experience and knowledge of the personalities involved to select the group of participants who are most likely to bring about an effective system of continuing education.

Check-list

Choose 15 to 30 people.

Include people with responsibility for health personnel, or responsibility for training.

Include representatives of professional associations and aid or development agencies.

Include people with expertise in continuing education.

Choose people who are available for the whole period of the workshop.

Contacting the participants

The workshop team needs to decide who will contact each of the participants and what form this contact will take. A sensible minimum contact would be a letter of invitation explaining the purpose of the workshop and why that particular participant is invited, accompanied by a copy of this book. The letter should indicate the parts of the book that should be read before the workshop.

Preparing the participants

Once the participants have been selected, the workshop leader or members of the workshop team should attempt to meet each one, to prepare him or her for the workshop.

During the meeting the workshop leader should try to find out the participants' views on continuing education and on the priorities in this field, and whether the participant could make any

special contribution to the workshop (for example, because of particular skills or experience in chairmanship or planning).

A further purpose is to identify potential problems in advance. Are there, for example, some people who are easily antagonized by others? Are there people with particularly rigid views? Are there people who have a tendency to dominate discussion too much, or to talk at length on irrelevant issues? The more that the workshop leader knows about the personalities, strengths and weaknesses of the individual participants, the better will be the chance of building on the strengths and of overcoming the weaknesses.

Finally, the meeting should result in the participant feeling more eager to take part in the workshop and to contribute positively to it. So it must be partly an exercise in selling the value of the workshop, while also accepting ideas on how the workshop could be made more relevant to each participant.

Achieving all this will probably only be possible in a limited number of cases since arranging and attending meetings with each of the participants will be extremely time-consuming. Each workshop leader will have to make decisions about how much time can be spent in meetings and how many of the meetings can be replaced by letters or telephone calls. However the principle remains that the workshop leader should establish contact with the participants before the workshop begins and should do as much as possible to create an atmosphere of enthusiasm for the workshop itself.

Check-list

Meet as many participants as possible before the workshop.

Identify their existing views.

Identify contributions they might make, or problems they might cause.

Stimulate enthusiasm for the workshop.

Location, accommodation and catering

Which institution will be the host for the workshop?

This decision will probably have been made before the planning meeting, so the question is mainly for confirmation.

Which rooms will be used during the workshop?

There needs to be one main room where the 15 to 30 participants can sit in reasonable comfort and all see each other while they talk. Ideally the room should be big enough for everyone to sit in a

circle or an oval. If you are uncertain about the size of a room, try placing one chair for each expected participant in the formation you intend to use.

Additional space is needed for discussion groups or syndicate groups to meet. For every five or six participants there should be at least one space. So you will need 3 spaces for 15-18 participants, 4 spaces for 19-24 participants and 5 spaces for 25-30 participants. The main room will probably be big enough to provide two of these spaces if the small groups work at opposite corners.

What provision will be made for meals and refreshments?

Will lunch, tea and coffee, and an evening meal be provided? If so, where? Who will be responsible for making the arrangements and for paying?

What provision will be made for overnight accommodation?

Residential workshops have substantial advantages. Participants are more likely to be able to concentrate on the business of the workshop for the whole day and evening when they do not have other commitments. However, residential workshops are more expensive.

Objectives and timetable

Objectives

Objectives for the workshop should be set depending on the local situation. Each workshop will have a slightly different emphasis, depending on the needs of the participants. For example, in some situations it may not be very valuable for participants to spend time considering policy documents. Another factor is the time available and the speed of working. In the workshop timetable a lot of ground is covered, so issues can only be dealt with fairly superficially. If greater depth is required or if it is felt that the participants might prefer to work more slowly and to spend more time in discussion, then some objectives should be deleted.

What should the daily timetable be?

This book suggests a working day from 09h00 to 17h00 with one hour for lunch, and extra work time in the evenings if necessary. Is this realistic? Can participants really be ready to start at 09h00? Will lunch be completed in only one hour? Would other schedules be more appropriate to the culture or climate? Will participants be willing to spend time working in the evenings?

Is five days the right length of time?

The suggested timetable is to some extent arbitrary. Local situations may make it possible to extend or contract the time. For example, it might be useful for the workshop to start on the evening before Day 1, at which time registration could be completed and participants could get to know one another. This would leave Day 1 for the exercises. On the other hand, some participants may need to travel home on Day 5, in which case it may not be reasonable to continue until 17h00 on this day.

Should all the exercises be included?

Depending on the objectives, some exercises may need to be deleted or adapted, or new exercises may be needed. This meeting is probably not the place to discuss in detail the nature of the changes to exercises or to prepare new ones. However, the meeting should decide who will be responsible for making the changes or for preparing new material.

Who will be responsible for conducting each of the sessions?

It is not appropriate for one person to conduct all the workshop sessions. It is probably better to have an overall workshop leader who will usually be the chairman of the plenary discussions at the end of exercises. Other members of the workshop team should take responsibility for making the detailed preparation of some of the sessions and for presenting them. Group leaders will also be needed for assisting in the small-group work and acting as facilitators and resource people. This meeting should identify these duties and the people who will be responsible for them.

Resources

A list of resources needs to be drawn up, and a decision made on how the resources can be provided, and who will be responsible for seeing that this is done. Members of the workshop team will probably already have experience of running educational workshops, but if additional general information is needed see *Educational handbook for health personnel* by J.-J. Guilbert (reference on page viii).

Books

Ideally every participant should have a copy of this book. All the books referred to on pages viii-ix, as well as those listed below, would be useful additional resources.

Continuing education of health personnel as a factor in career development: report on a WHO Working Group. Copenhagen, WHO Regional Office for Europe, 1979 (EURO Reports and Studies, No. 6).

Continuing education of health personnel and its evaluation: report on the technical discussions at the twenty-ninth session of the Regional Committee for Europe, Helsinki, 1979. Copenhagen, WHO Regional Office for Europe, 1980 (EURO Reports and Studies, No. 33).

WHO Technical Report Series, No. 534, 1973 (*Continuing education for physicians:* report of a WHO Expert Committee).

A table or stand will be needed to display these books.

National documents describing health policies and plans

If these are long, then it will be useful for a member of the workshop team to prepare a summary, which will be easier to read during the workshop. This will also be valuable in making sure that at least one member of the workshop team has a detailed knowledge of the policies and plans.

Curricula of training programmes for all categories of health staff

Again summaries may be valuable.

Data on demographic characteristics, morbidity, mortality and health system utilization

These data will form the basis for discussion of the needs for continuing education. In particular, up-to-date figures on morbidity and mortality should be available, as should any locally prepared reports or surveys on the way in which health care is provided or the effectiveness of the health care provision in the local area. The workshop leader must ensure that the workshop takes full account of local circumstances. Quite a lot of time will be needed to make sure that all relevant local documents are available, so it would be a good idea to involve a number of the participants before the workshop in trying to identify useful data.

Reports of any work studies done in the country or region

If no work studies have been carried out, one or two members of the workshop team might visit several health workers from different groups and briefly interview them. The interviewer should find out

what the health workers want to learn about in continuing education and what they see as the weaknesses in the provision of health care in their area.

Loose-leaf binder and a hole puncher

If the participants are to preserve their reports in a systematic way, so that they can be referred to later, they will need some form of filing system, preferably a loose-leaf ring binder. Do not forget to provide a hole puncher so that the sheets of paper can be put into the file.

Large sheets of paper, a flip chart, and pens

Each of the spaces for small group work will need a table (where the chairman or reporter can sit to record the points arising from the discussion on large sheets of paper), five or six chairs, and a supply of paper and pens. Often these small groups will report their conclusions to the main group and so will need a way of presenting this information visually (a purely verbal report is not satisfactory) so large sheets of paper (about 1 metre $\times$ 60 cm) for the flip chart will be needed.

Because of the method of reporting, it would be desirable to have space in the main room to pin or stick the large sheets of paper to the walls or to a screen so that the reports can be displayed and referred to later in the workshop. A flip chart is also useful in the main room, and should be placed where everyone can see it clearly and comfortably.

Overhead projector, transparencies and pens

An overhead projector can be used as an alternative to a flip chart.

Secretarial support

A number of the reports and conclusions coming from both the small groups and the main group will be worth preserving. So there should be a secretary or typist to type the reports, and duplicating facilities (possibly a photocopier) so that copies can be prepared for each participant. Ideally, the secretary should be available throughout the workshop and should have a room with a typewriter, duplicator, etc., near to the main workshop room.

Check-list

Resources needed include the following.

A main room large enough for all participants to sit facing each other.

Space for small-group work.

A board for holding flip charts.

An overhead projector, screen, transparencies and pens.

Large sheets of paper and pens.

Tables.

A secretary or typist, typewriter and a duplicator or photocopier.

Loose-leaf ring binders for all participants.

Reference books.

A summary of the national health policy and national health plan.

Data on morbidity, mortality, demographic characteristics, health service facilities, health service utilization.

Reports of any work study analysis.

Curricula of training programmes.

Administration

The administrative arrangements will vary widely from one place to another, so it is not possible to specify exactly what is necessary. The people attending the planning meeting are in the best position to judge what should be done. A few possible areas are listed below for consideration, but this list should not necessarily be regarded as complete.

Check-list

Ensure the availability of all resources.

Obtain authorization for participants to attend the workshop and arrange for replacements, if necessary.

Arrange payment of travelling and/or subsistence allowance.

Publicize the workshop.

Inform the appropriate authorities about the workshop.

Prepare and distribute the report of the workshop.

It can be seen that a lot of decisions need to be made at this planning meeting. It might be useful for the workshop leader or a delegate to prepare detailed suggestions to be circulated in advance to the people attending the meeting. Then the meeting could be

devoted to confirming the proposals and to focusing on areas of difficulty.

Follow-up

Well before the workshop, the workshop team should be thinking about the types of follow-up activity to be carried out.

In increasing order of importance this might involve the following.

1. Providing information to the World Health Organization.
2. Providing guidance on improving the workshop.
3. Encouraging the implementation of the plans formed during the workshop.

Providing information to the World Health Organization

This involves completing the questionnaire on page 185. The purpose of this evaluation is to identify ways in which the advice given in this book can be improved, to find out how many workshops have taken place, and where, and to make a very preliminary estimate of the impact these workshops have had. The cooperation of workshop leaders in preparing these reports would be very greatly appreciated.

Providing guidance on improving the workshop

This second aspect only applies where the workshop leader expects to be running a similar workshop, or will be in a position to advise others. If this is the situation, then the workshop leader will want to get as much feedback as possible from the participants about how the workshop can be conducted more effectively. Where should more time be spent, and where less? Which exercises were most helpful, and which least? How can the less helpful exercises be improved? For notes on workshop evaluation see page 183 onwards.

Encouraging the implementation of plans

This third aspect of the follow-up is the most important. It is concerned with the consequences of the workshop, in other words, what happens afterwards. Certainly if nothing happens then the workshop has been a waste of time.

There are two reasons for evaluating the outcome of the workshop. The first is simply that there is a need to know what happens and to find out how effective the workshop has been in

stimulating development. The second is that, if the participants are involved in the evaluation process, then this will in itself increase the probability of their becoming actively involved in developing the system of continuing education. Evaluation cannot guarantee that change will take place—it simply makes it more likely.

The basis for this evaluation of outcomes should be the plan of action prepared on Day 5. The workshop leader should find out from each participant at appropriate times whether the plan of action is being implemented. This should be supported by discussions to find out why some things have been possible whereas others have been more difficult to achieve. The aim of this evaluation therefore is to stimulate the process of change and to learn more about the factors that control whether change occurs.

The way in which this evaluation is carried out will of course depend very much on the enthusiasm of the workshop leader, and on local factors, for example, the ease or difficulty of communication and the relationship between the workshop leader and the participants. Detailed guidance here would therefore be inappropriate. However, whatever procedure for evaluation of outcome is followed, it should be agreed on by the participants and possibly be based on their suggestions.

Some suggestions for evaluation are given below. It is recognized that it will never be practicable to follow all of the suggestions; ideas should be selected and adapted to suit local circumstances.

1. Hold a follow-up workshop after six months or so to review what progress has been made.
2. Write to each participant after a few months to ask how their ideas have changed or what they have done.
3. Write a newsletter on continuing education based on the work done by members of the workshop.
4. Form working groups to implement continuing education.

These tasks can be shared out among the workshop participants.

Conducting the workshop

This section provides guidance on conducting the workshop according to the timetable outlined, pages 119–126, and using the exercises described on pages 127–150. This guidance is based on experience of conducting similar workshops. However no two situations are alike and no two groups of workshop participants are the same. Therefore the guidance is meant to be flexible; it is not a set of instructions guaranteeing success.

It is also worth stating again that the timetable and exercises should be adapted—possibly substantially—to suit the specific needs of the local situation.

Day 1

Is a system of continuing education needed?

09 h 00	Arrival and registration
09 h 30	Welcome and introduction to the workshop
10 h 00	<i>Exercise 1</i> —Is continuing education important?
11 h 00	Break
11 h 30	<i>Exercise 1</i> —continued
12 h 15	<i>Exercise 2</i> —What continuing education is currently available?
13 h 00	Lunch
14 h 00	<i>Exercise 3</i> —Is the current provision of continuing education satisfactory?
15 h 30	Break
16 h 00	<i>Exercise 4</i> —Are there resources for continuing education that are under-used?
17 h 00	Close

Arrival and registration

The amount of time suggested for registration is half an hour, on the assumption that the participants will not have to travel far to the workshop and that most of the participants will know each other fairly well. If these assumptions are not true a later start must be planned, or more time allowed. If more time is needed then the timetable for the rest of the day must be adapted accordingly.

During the registration period you should check whether all expected participants have arrived, whether they have all the papers that you want them to use and whether there are any problems over accommodation.

If the participants do not know each other well, you might introduce pairs of participants who have not met before or who know each other only slightly. Then ask them to interview each other as if they were newspaper reporters.

Some questions they might ask are given below—but they should not ask questions that they would not be willing to answer themselves.

What do you like most about your work?

What do you probably do best at work?

What don't you like about your position and job?

What would you like to do better in your job?

If you were at the beginning of your career do you think you would end up doing the same thing? How might things be different?

What are your hobbies? What do you like to do in your spare time?

How helpful do you think participants in this workshop could be to each other?

What are you most looking forward to from this workshop?

If time is available, ask each participant to introduce his or her interviewee to the group. The atmosphere should be lighthearted and informal. To help achieve this members of the workshop team could introduce participants. One or two minutes is needed for each introduction, so it is a time-consuming process, though it is time well spent for a group in which the members do not know each other well. It is certainly more effective than asking each participant to introduce himself or herself.

Welcome and introduction to the workshop

The welcome to the workshop may be carried out by the workshop leader or, if it seems appropriate, by some senior member of one of the health professions or a senior member of the Ministry of Health. If an outside speaker is chosen, it will be important to offer some suggestions about the key points to be made in the welcoming speech. These will, of course, vary depending on local circumstances, but might include an expression of the Ministry of Health's commitment to develop continuing education.

The introduction to the workshop should include some description of the kind of contribution expected of the participants. They should know that they are not there to listen passively but to take an active part in discussions and in formulating plans. Another point is that the workshop is not an end in itself but must be seen as a stimulus to action. This may also be a good time to give recognition to those participants who have already been involved in continuing education programmes. Finally you might check that all participants are willing and able to take part in all of the workshop sessions and explain how important this is.

Fairly detailed notes are given below for each of the activities in the remaining sessions. Provided activities run to schedule, no further guidance should be necessary. The problem remaining is whether the activities will be completed within the time limits. You may have to decide whether it is better to complete a few of the activities thoroughly or do all of them more superficially. You may be able to extend the time available by arranging evening sessions, though obviously the participants must be in full agreement with any change in the timetable.

The day's sessions should close with a request that the participants read Chapters 3 and 4 of this book in preparation for the following day's work.

Exercise 1 — Is continuing education important?

Procedure

See page 127.

This exercise starts by defining what is meant by continuing education. The participants make their own decisions about what

should be included within this term. This could lead to difficulties and so you may prefer to provide a definition in advance.

Preparation

Provide enough copies of the table on page 128 (at least one per workshop participant). Prepare large versions of the table on flip charts or provide overhead projector transparencies showing the basic structure of the table, so that the groups can complete their tasks jointly and present the results of their discussion.

This session should be a fairly relaxed beginning to the workshop in which people get to know each other and become more confident about expressing their ideas. The workshop team can foster this approach by responding positively to suggestions made, and by ensuring that all participants have an opportunity to express themselves in the group discussions.

Exercise 2—What continuing education is currently available?

Procedure

See page 129.

Brainstorming is the method used in this exercise. For general notes see page 178. The two key points for you, as the leader, are that during the second stage you must be fast and you must be firm. Record all suggestions as quickly as possible (in a single word if you can) and move on to the next suggestion. In this way the flow of ideas can be maintained. Do not permit any discussion or debate about any suggestion—this will all come later. You should also be ready with your own suggestions to start the flow going again if it stops for any reason. For example, have the participants thought of drug company representatives, articles in the local newspapers for the general population, radio or TV programmes, meetings with supervisors, meetings with patients or clients, etc? Have they thought of the different agencies and the different methods?

When it comes to the categorization at the end it might be worth grouping the suggestions under headings and using a sheet of flip-chart paper for each heading. Suggested headings are given below:

1. Type of educational method, e.g., courses, radio programmes, journals.
2. Agency providing the educational activity, e.g., Ministry of Health, drug company, faculty of medicine.
3. Topics, e.g., control of diarrhoeal disease.
4. Recipients (people who take part), e.g. health inspectors, nurses.

These categories overlap slightly (where would you put 'supervision?'), but this weakness is not very important.

Preparation

The only materials that you need are either the overhead projector plus several transparencies or, preferably, a few large sheets of paper with appropriate pens.

Finishing the session

The end-point is a list of current activities. This should be typed up and distributed as a handout if possible. The results in this form will be very useful in the first session during the afternoon when the current provision is considered.

Exercise 3—Is the current provision of continuing education satisfactory?

Procedure

See page 131.

Any session after lunch is likely to have a slightly more drowsy group of participants than at other times of the day. You may feel that there is a less ready response from the participants than you hoped and so you might fall into the trap of talking too much. A better approach is to ask more questions, possibly making slightly outrageous suggestions so that someone will be tempted to argue with you. Try to ensure that as many people as possible take an active part in the group discussions.

Various statements have been suggested for discussion on page 131. You may well feel that other features of continuing education systems are more urgent or relevant in your situation, so you should adapt the list as necessary.

Preparation

Provide large sheets of paper for each group with the statements written down the left-hand side, allowing space for comments on the right.

When conducting the review session you should draw attention to the areas where agreement/disagreement occurs and attempt to resolve differences. You should also point out that the agreed statements form a very general specification for the type of continuing education system that the group intends for their country. Future exercises will build on these conclusions.

Exercise 4 —Are there resources for continuing education that are under-used?

You should run this brainstorming in just the same way as the morning session, so you will need the same materials and you will need to think of suggestions to keep the flow of ideas going. You must also keep up a rapid pace—if someone starts to say 'I think I know a place where if the lease runs out, as I think it will, in six months time, then . . .', you must stop this and ask the person just to name the building.

When it comes to classifying the resources it might be useful to do this under the following headings.

1. People or agencies who might provide facilities, equipment or money.
2. People or agencies with expertise or skills to offer (either as teachers or as health workers).
3. Facilities such as buildings or equipment or a capacity for printing or communication (e.g., a radio station).

It is important to provide a conclusion to this session. This should take the form of a typed handout listing the various resources. You should also review what has been done during the day, i.e., briefly summarize the key points of each session.

Finally you should explain that the next day will see the beginning of planning for what will be done in the future.

Day 2

What are the needs for continuing education

09 h 00	<i>Exercise 5—What continuing education is needed in this area?</i>
11 h 00	Break
11 h 30	Reports and discussion on Exercise 5
13 h 00	Lunch
14 h 00	<i>Review—What is meant by a policy document?</i>
14 h 30	<i>Exercise 6—Preparing a national policy document for continuing education</i>
16 h 30	Summary of progress on the policy documents
17 h 00	Close of formal session
	Group work to continue in the evening

The timetable for Day 2 contains only two exercises. As the length of an exercise increases it becomes more difficult for the workshop team to manage it. There is a greater risk of not completing the work, or of groups going in quite the wrong direction. On the

other hand if supervision is too tight the participants may resent your interference. It will probably be valuable for a member of the workshop team to be attached to each of the groups as they work, in order to help the chairman of the group keep more or less to time.

The only remaining point is to ask the participants to prepare for Day 3 by reading Chapters 5 and 6 of this book.

Exercise 5 — What continuing education is needed in this area?

Procedure

See page 135.

Explain in the introduction two key points:

1. That the participants will now begin to formulate policy (i.e., by looking at needs) and so, in this exercise, they will start to look at what should actually be done in the country.
2. While the analysis of needs, carried out in the morning, cannot be complete, it does establish a pattern of thinking, i.e., that identifying needs leads to knowledge of what teaching could meet those needs, rather than thinking about what could be taught and then justifying it. It is important in continuing education to think in terms of needs leading to provision.

You should have available the back-up data needed for this exercise. As far as possible you should provide:

1. Any national or local policy documents that indicate that a change is to take place (or should have recently taken place) in the ways in which health care is provided.
2. Data on morbidity and mortality for the country or local area.
3. Information concerning the number of each category of health worker, together with job descriptions.
4. Any local surveys or analyses of the quality of health care or the opinion of consumers. This may include data about water supply, food production, housing conditions, etc., as well as the more usually available data on the incidence of disease.
5. Curricula for training programmes.
6. Reports of any interviews conducted with health workers.

A danger point in this exercise is the time when the groups separate. It is very easy for them to spend a lot of time discussing who will chair the group and how they will work, and carefully reading any data you provide. This slow process should be speeded up by you. If you feel it is appropriate, appoint chairmen and sec-

retaries yourself, and help each group to get the first line of the table (see page 134) completed so that they have a model of how to proceed.

Sit in on each of the groups. Listen to how they work. Notice who has the ideas. Check that progress is being made at a sufficient speed and if necessary help the groups to produce appropriate tables.

Check that the column 'What needs to be learnt' is in the form of learning objectives (i.e., what the learner will be able to do — such as 'persuade village leaders that a supply of clean water can be installed by the village people' or 'maintain hand-pumps in a serviceable condition') rather than in the form of topics (for example, water supply systems).

In the reporting session you must ensure that time is well spent. Half an hour is allowed for each group to report and have its work discussed. Try to avoid spending more time than this on any one group.

During the reporting session try to show how the different perspectives lead to different statements of need and different learning objectives. Ask whether there is a conflict between the various perspectives. Ask whether some perspectives have not been considered in the exercise (note that patients and health workers themselves have not been asked what they see as being important!).

It is well worth the trouble of arranging for the results of this session to be typed, duplicated and distributed to all the participants.

Finally, it is entirely appropriate to modify this exercise. You might use four groups instead of three, or set up groups to look at needs from different perspectives. The workshop should be adapted to suit your needs and the needs of the participants.

Exercise 6 — Preparing a national policy document for continuing education

Procedure

See page 137.

Your initial task in this exercise is to explain in more detail what is required of the groups and to organize the participants into suitable groupings. The exact size of the groups does not matter too much, though groups of less than five, or more than eight, people might present difficulties.

During the group discussions it is important to provide a little — but only a little — guidance. For example, you should not be advising on what the policy should be, though you may well be asked whether it is appropriate to include some aspect, or how much detail should be given. In order to answer these questions you should be familiar with at least some of the policy statements produced locally so that you know the local requirements.

You should also help the groups to manage their time so that they will produce a document by the beginning of the first session on Day 3. You may also need to help groups to start putting their ideas on paper and then to move on to consider the next point, since it is often a weakness of small-group work that when there is difficulty in reaching unanimous agreement the group becomes unwilling to record anything.

The 16h30 review session should be cancelled if you feel that the participants will not be willing to continue their work during the evening.

Day 3

From policies to programmes

09h00	Report on the policy documents prepared in Exercise 6
10h30	<i>Exercise 7</i> —What management activities will the system of continuing education be involved in?
11h00	Break
11h30	<i>Exercise 7</i> —group work
12h30	<i>Exercise 7</i> —review
13h00	Lunch
14h00	<i>Exercise 8</i> —Preparing an example of an educational programme for the system of continuing education
14h30	<i>Exercise 8</i> —group work
17h00	Close of formal programme Group work to continue in the evening where appropriate

The session to report on the policy document prepared in Exercise 6 should not aim to collate the various documents into one that is acceptable to all participants—an hour would be far too short a time for this. Instead each of the policy documents should be accepted, and you should ask the participants to draw attention to serious differences between documents and try to find out why the different groups hold different views. You should also ask the participants to look for inconsistencies within a document. Perhaps the most difficult task will be to ensure a sufficient level of detail so that the policy document is more than a bland, general indication of good intentions.

Again it will be valuable to have each of the policy documents typed and distributed to each of the participants.

The two main exercises for Day 3 could potentially each take several days of hard work. So your major problem is to get the participants to realize that even the small amount of time spent on these exercises is worthwhile.

One alternative you might consider is for half the group (possibly made up of the people more concerned with management and policy) to tackle Exercise 7 only, while a second group (possibly those with more expertise in educational methodology) do Exercise 8. This

would allow more time for each of the exercises and would be quite feasible as the two exercises are independent of each other.

Whether you choose this alternative or not, your main concerns throughout the day should be as follows.

1. To help the groups manage their time by letting them know exactly how much time is available and by helping them get through the preliminary stages of the group work as quickly as possible.
2. To ensure that the group work proceeds along the right lines by checking regularly to see what has been produced.
3. To emphasize the need to link whatever is done on Day 3 to the policy document produced on Day 2. You must make sure that the group sees the importance of the sequence:

Analysis of needs/problems → Policy → Programme → Implementation

4. To maintain a purposeful approach during the review sessions. As was the case for the policy document, the aim cannot be to reach unanimous agreement; the aim must be to identify where agreement exists and where differences lie—and possibly the reasons for these differences.

If appropriate, a review session may be held at 16h30 to check that each group is making progress and to give ideas for the evening's work. If the groups will not be working in the evening, the review is unnecessary.

At the end of the day you should remind participants to read Chapter 7 of this book in preparation for Exercise 9 on Day 4.

Exercise 7 — What management activities will the system of continuing education be involved in?

Procedure

See page 138.

You should introduce this session by drawing attention to the two types of activity involved in a continuing education system, as explained in the commentary for Day 3, on page 123.

For this exercise, the participants work in pairs, which should probably be formed from within the groups that worked on the policy documents, so that they are not referring to different policies.

Preparation

Provide lots of large sheets of paper reproducing the table on page 139, so that you can record the responses of the participants.

Think through the list of activities and try to identify examples of each activity that already take place or should take place in your area. You might also check whether there are activities currently

taking place that do not fit any categories in the table and so require an extension to the list.

Again it is important to summarize the session and provide some kind of record; the final table of activities and resources should therefore be typed, duplicated and distributed.

Exercise 8 — Preparing an educational activity

Procedure

See page 140.

You might like to introduce this session by pointing out two things:

1. While the group attending the workshop may be primarily interested in organizing and establishing a system, the whole point of the system is to provide education; for this reason, it is worthwhile exploring what is involved in planning these educational activities.
2. Although the wide range of possible teaching and learning methods in continuing education is often referred to, in practice most people think in terms of refresher courses. It might be worth insisting that alternative methods are considered.

Day 4

Organizing the system of continuing education

09h00	Exercise 8 (continued) — presentation of group work and review
11h00	Break
11h30	Exercise 9 — Organizing the system of continuing education
13h00	Lunch
14h00	Exercise 9 — continued
17h00	Close

This day moves on from a consideration of the activities that the system will be involved in, to a discussion of how these activities can be organized. It is worth repeating here that the structure must be consistent with local ways of doing things.

Exercise 9 — Organizing the system of continuing education

Procedure

See page 143.

This exercise is very similar in style to the previous two exercises and so your role is much the same, i.e., helping groups to manage

their time, keeping them to the point, and acting as chairman for the review sessions.

There is a little less pressure during this day, as only one exercise is attempted. This allows a slightly more relaxed debate about issues for which there can be very few 'right' answers. The group will probably have a lot of experience of organizational structures from their own work and will regard themselves possibly as more expert in this exercise than in others. The pace can therefore be a little slower to allow more time for debate.

Day 5

Evaluation and plans of action

09h00	Review of technical document — evaluation
09h30	<i>Exercise 10</i> — What questions should an evaluation answer?
11h00	Break
11h30	<i>Exercise 11</i> — What data will be needed in the evaluation?
13h00	Lunch
14h00	<i>Exercise 12</i> — Preparing a plan of action
15h30	Break
16h00	Evaluation of workshop
17h00	Close

The main difficulty for you on this day is to decide how much time to spend on the plan of action (*Exercise 12*). This is the most important part of the workshop and so must be done properly. However, the time needed will vary depending on the circumstances, and on factors such as how rapidly the group reaches agreement and how far the development of a system of continuing education has advanced.

If the workshop is held in a place where a system of continuing education is about to be established, it may be worth spending the whole day on the plan of action. This will mean that Exercises 10 and 11 have to be left out or scheduled for earlier in the week.

It would generally not be appropriate to reduce the time allowed for the plan of action. This is because the plan of action is the critical link between the talking that goes on in the workshop and significant action outside.

The evaluation of the workshop, scheduled for 16h00 on Day 5, will also vary depending on the circumstances. Do you want guidance on how to run similar workshops better—or is this the only one? Have there been problems which you would like to allow the group to talk about? What information do you need? Decide what purpose the evaluation will serve.

The method for workshop evaluation suggested on pages 183–184 is very flexible and can be used to serve many purposes by ensuring that different statements are considered. But even though the method is flexible, there is no reason why you should not use an alternative method if this seems more appropriate to you.

Finally, on this day, it is possible that a number of participants will want to leave early. It is worth finding out in advance whether this is the case. If people do want to leave then you should try to reduce the disruption as much as possible by scheduling an earlier close. It is especially desirable that the plan of action exercise is not disrupted, so this might be moved to the morning.

Exercise 10 — What questions should an evaluation answer?

Procedure

See page 146.

The grouping for this exercise suggested on page 146 is only one possibility; it has been chosen so that each group is complementary to the others. Other groupings would tend to overlap more in the work to be done. However you must decide which grouping is most appropriate in your situation.

The groups may not have organized their own brain storming sessions before, so you should review this technique with them if necessary. It is worthwhile pointing out that to obtain the benefit of the technique it should be followed quite rigidly.

In the review session it is probably less important to identify the poor suggestions and delete them, than it is to try to identify gaps and remedy these deficiencies.

Exercise 11 — What data will be needed in the evaluation?

Procedure

See page 147.

This is a fairly straightforward exercise where your role will be:

1. To help the groups manage the time available.
2. To provide advice on request.
3. To ensure that the suggestions made for data to be collected will actually be helpful in answering the question or reaching the decision.

One problem that the groups will have to face is that for some questions it will not be feasible to collect all the data that would ideally be required. This is inevitable and you should reassure the groups that it is quite common to have to make decisions on the basis of insufficient information.

If time permits, it may be useful to estimate how much it will cost to collect the data suggested (in terms of both time and resources) and then ask whether the data are, in fact, worth collecting at that cost.

*Exercise 12 — Preparing a plan of action***Procedure**

See page 149.

As mentioned elsewhere, this is the most crucial exercise of the whole workshop. A limited time is allowed here for the discussion, which may be extended if required.

Discussions that took place the previous evening may have provided specific suggestions, which the group can then agree upon or amend.

The process of forming an agreed plan will depend very heavily on your skill as a chairman. You may prefer to hand over the chairmanship of this session to one of the workshop participants if you feel that this would be more useful.

Certainly this will be a difficult session to lead in such a way that all participants are involved, while at the same time ensuring that the plan is coherent, feasible, appropriate, and finished on time.

Educational methods**Brainstorming**

Brainstorming is a technique for generating ideas or a variety of solutions to a problem. The word brainstorming is sometimes used wrongly to describe any meeting at which ideas are produced. In fact it is a precise technique and unless the method is followed closely its value is lost.

Brainstorming is an appropriate technique for use in management team meetings, which often need to find solutions to problems or to produce new ideas. It can also be used in workshops and at any time when smallish groups of people (4-20) need to produce new approaches, ideas or solutions. There are four distinct stages, which must be followed in order.

Stage 1 — Defining the problem

All members of the brainstorming group must be clear about the kinds of ideas that they are trying to produce. Examples of problems might be:

1. How can the existing vehicles at a hospital or a district office be better used?
2. What data are needed in order to identify health care priorities?

Stage 2 — The brainstorm itself

The chairman invites suggestions or ideas. These are recorded on a board or an overhead projector as quickly as possible. All ideas are

recorded whoever makes them and however silly or inappropriate they may seem. No discussion or clarification of any kind is permitted at this stage. This continues until the ideas are exhausted. The chairman should have some ideas to suggest to start the flow again when ideas from the members start to dry up.

Stage 3—Review

Each of the suggestions is reviewed, and clarified if necessary (sometimes only a word may have been recorded to represent a complex idea). A decision is made on whether to keep the suggestion on the list for future discussion or to throw it out. The aim is not to decide whether the idea is good or not, but simply whether it is worth discussing. Repetition of ideas is one reason for throwing out suggestions.

Stage 4—Discussion

The remaining ideas are discussed to decide which suggestions are worth developing further.

Why does the technique work?

The brainstorming technique works because many people are either consciously or subconsciously afraid of putting forward ideas in case they are ridiculed or the ideas are just not good enough. In the brainstorming session all ideas are accepted and the natural tendency to evaluate an idea before expressing it is 'switched off'. In this way the participants become less inhibited.

Further, the speed at which the ideas are produced itself stimulates more ideas. Someone may have a foolish idea, but someone else may build on that idea to produce something better.

When should brainstorming be used?

This is not a technique for making decisions, or for evaluating in detail different options, or for preparing well structured arguments. It is simply a method of generating ideas and possible solutions. Other techniques should be used to decide whether the ideas or solutions can be used.

The method should be used from time to time in business meetings or management teams when suggestions for solutions and new ideas are needed.

Leading a small-group discussion

Why small-group sessions?

The fundamental reasons for using small-group sessions stem from an understanding of how people usually learn. Information that is

only heard is rapidly forgotten. For longer-term retention of information or skills, the information must be processed and used by the learner, and related to what the learner already knows. The learner should also have an incentive to learn. A relaxed and informal atmosphere is more likely to lead to genuine learning than a threatening or stressful environment.

These conditions can be achieved to some extent in lectures, but when small groups are well conducted, the conditions for learning can be much more favourable.

How to conduct small-group sessions

The over-riding principle is to attempt to create favourable conditions for learning, as outlined above. This can be done by using the following techniques.

1. Set the objectives of the sessions (either independently or in discussion with the learners) so that what is to be learnt relates to what the learners have recently heard, read or experienced. The essence is to apply what has already been partially learnt rather than to cover new ground.
2. Control the degree of participation of each of the members of the group. Make sure that all members participate and that no one person dominates the discussion. This is because the exercise of actually formulating opinions and putting them into words is a powerful learning experience, in which everyone should take part. You can help to ensure this by directing questions to the more reticent members of the group and inviting the more talkative to wait until the others have had a chance to speak. Much depends on the manner in which this is done.
3. Set a well defined end-point. This will help to make the discussion more purposeful and structured, so that it is easier for the learners to relate what is being said to their previous knowledge. This can be done by asking for a list of recommendations, a list of advantages and disadvantages, and a decision. Appointing one or more of the learners as secretary to note down the major points on a board or chart is helpful.
4. Maintain the relevance of the discussion by asking questions such as: 'Is that idea consistent with your experience?' 'Do you think you will be able to use that idea in your future work?'
5. Clarify the discussion by asking one learner to summarize what another has said or asking learners to identify whether comments are facts or opinions. Where clear errors of fact occur, correct these. Refer to the secretary's summary of points made from time to time. Keep all comments relevant to the main theme of the discussion.

6. Prepare material for discussion in advance. This may involve preparing sheets of data, or reference material for the learners to discuss. It will certainly involve drawing up for yourself a list of the major points that you feel should be covered and generally being familiar with relevant facts and commonly held opinions.
7. Prepare the environment. All participants in the discussion should be able to see everyone else's face and be close enough to hear each other comfortably. The atmosphere should be friendly and relaxed. If students do not know each other they should be introduced. The mood should be reasonably light-hearted yet purposeful. There should be no fear of exposing ignorance.
8. The leader should say little. The style of asking questions is vital. Questions such as 'Well, what do you think about that?' can be so open-ended that a nervous student will be intimidated. So it may be better to start with a more closed question such as 'Do you agree with what has just been said?' and then follow this up with 'Why do you (not) agree?' The simple question 'Why?' can be very effective in encouraging confident students to clarify what they have said. It can be terrifying to more nervous students. Above all the discussion leader must not give a lecture.

Purposes of small-group sessions

Small-group sessions should generally not involve the introduction of new facts. They should aim to:

1. Teach the application or evaluation of facts or ideas that have already been introduced;
2. Develop skills in expressing ideas and formulating arguments;
3. Change attitudes (since attitudes are often effectively changed when learners express their own ideas—rather than by listening to other people's ideas).

Using overhead projectors

The use of an overhead projector is one way of showing words or diagrams to a group of people. It has some advantages over the more conventional chalkboard or blackboard and every effort should be made to make one available for the workshop. If an overhead projector cannot be made available, then some of the educational points made on page 182 also apply to charts.

Basic techniques

The overhead projector allows you to face the group while writing on a transparency. This permits better contact with the group than having to turn your back to write on a chalkboard or a chart.

The workshop leader can also use a pencil to point out a particular word or part of a diagram on the transparency, while continuing a discussion.

The dangers are that the workshop leader may get between the projector and the screen and cause a shadow; try to write too much on one transparency (and make the writing illegible); or stand between some of the group and the screen (obscuring the view). If you avoid these dangers and use some of the techniques described below than you have a powerful device for improving the quality of communication.

Educational points

The overhead projector extends the range of things that a workshop leader can do. Some of these ideas are given below.

Structure presentations

Write down the main points to be covered on a transparency before you start the session. Then show this while you make the points. This will help to keep you on the topic and will help the group follow the structure of what you are saying.

Prepared diagrams

You can take plenty of time drawing diagrams carefully on a transparency before the teaching session. The time is well spent because the diagram can be used time after time. Beware of trying to put in too much detail and of making the writing too small.

Reporting from groups

Each group can write down its opinions, recommendations, suggestions, etc., on a transparency, which can then be projected. In this way the overhead projector can be used to help different groups of learners communicate with each other.

Structuring a discussion

In discussions, it is easy for people to start going off the subject. This tendency can be reduced by writing down the topic, and the aspect of the topic that is being discussed. As conclusions are

reached, they can be recorded making it easier for the whole group to keep together.

These are just a few suggestions for using the overhead projector. The main limitation to its scope is your own imagination.

Evaluating workshops

When you are evaluating workshops, or any educational activity, you should look at three aspects.

1. The plan, i.e., the objectives, the programme, the decisions about methods, etc.
2. The process, i.e., what actually happened, and the immediate response.
3. The product, i.e., what was learnt and the effect this had.

Just one of the many possible methods of evaluation is suggested here. The aim of this method is to find out what the participants feel about the issues that they see as being important.

The procedure

Stage 1

Describe to the participants the procedure and the aim of the method.

Stage 2

Ask each participant to write down a few statements about the workshop. They should be encouraged to write down the things they feel are most important. The statements should be fairly specific. For example, the statement 'The workshop was good' is not nearly specific enough. The way in which it was good should be expressed, so a more useful statement might be 'The stated objectives were appropriate to my needs'.

It does not matter whether the statement is thought to be true or not, since this is dealt with in Stage 4. An equally suitable statement would be 'The stated objectives were not appropriate to my needs.'

Stage 3

Record the statements on a transparency or chart. At this stage they should be discussed with regard to whether their meaning is clear, but not with regard to whether they are true.

Statements from different members of the group will overlap, so a lot of them can be left out without losing important ideas.

Allow space for five columns to the right of the statements on the transparency. These columns are used in Stage 4.

Stage 4

Voting. When the statements are clearly written and understood the participants are asked to decide whether they strongly agree, agree, have no opinion, disagree, or strongly disagree with each statement. They vote by showing hands. To help the voters, you should make sure everyone has decided on their opinion before you ask for the first group, who 'strongly agree', to raise their hands.

You now have a record of how everyone feels about the issues that were seen as important by the participants. If you wish you can insert some statements of your own on which you would like the participants' opinion.

The crucial thing now is to learn from this evaluation and use it to make the next workshop better.

After the workshop

When the workshop is completed, it is tempting to relax and do no more. However, if the workshop has succeeded in its objectives then it is only one stage on the route to establishing a system of continuing education. There are several things that the workshop team should do to help this process.

1. Prepare a very brief report on the workshop based on the questionnaire on page 185. This should be sent to WHO if possible. You might also like to send reports of the workshop to relevant local agencies (any agency that sent a participant for example) to create publicity for the concept of continuing education.
2. Continue to discuss with participants their reaction to the workshop and to identify ways in which the workshop could be improved.
3. The most important task is to fulfil all your commitments made in the plan of action, and to assist other participants to fulfil their commitments. In this way the workshop will achieve its prime objective of assisting in the establishment of a system of continuing education.

Questionnaire

This questionnaire is designed to be completed by the leader or team of a workshop on continuing education.

The purpose of the questionnaire is to provide guidance to WHO on the extent to which this book has been used. The questionnaire will also help WHO to estimate how useful the book is and how it can be improved.

Please complete this questionnaire and return it to: Division of Health Manpower Development, World Health Organization, 1211 Geneva 27, Switzerland.

Questionnaire

The workshop

1. Where was the workshop held? Country: _____
City/town: _____
Institution: _____
2. How many participants were there? _____
3. How many days did the workshop take? _____
4. Which organization sponsored the workshop? _____
5. Who selected the participants? _____

The general response to the workshop

1. Did participants in general feel that the workshop had been (please circle the correct response):
Very successful/fairly successful/of some value/a waste of time?
2. Do you feel that specific changes will result from the workshop (for example, will a system for continuing education be established or strengthened)?
3. What follow-up to the workshop is planned by you, or by the workshop participants?

Your reaction to this manual

1. Did you find that the timetable and exercises suggested in this book were practicable? (For example did you follow the suggested timetable and did you use the exercises?) If problems occurred, please mention them.
2. Did the participants find Chapters 1-9 of this book useful? Please comment on which were most/least helpful, and why.
3. Did the workshop leaders find Part III useful? Which parts were most helpful/least helpful.
4. Did you use any teaching methods that you have not tried before? If so, which methods did you use and what is your reaction?
5. Please give any comment on how this book could have been more useful to you.

To be returned to: Division of Health Manpower Development,
World Health Organization, 1211 Geneva 27, Switzerland.

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There is increasing recognition of the need for health workers to continue their education throughout their careers, if they are to improve their skills and knowledge and keep up with the rapid developments taking place in health care. For this education to be useful and relevant, it must be carried out as part of a coordinated programme or system of continuing education, adapted to the needs, not only of the health workers themselves, but also of the communities they serve.

This book promotes the development of such a system, through the organization of a workshop on continuing education, bringing together decision-makers and other interested parties from the fields of health and education. In addition to providing practical advice and information on the preparation for, and day-to-day running of, such a workshop, the text contains a detailed discussion of the factors to be considered and the problems likely to be encountered in establishing a system of continuing education. While this material has been written primarily as background documentation for the participants in the workshop, it will also be of interest to the individual reader, as will the exercises suggested for inclusion in the workshop.